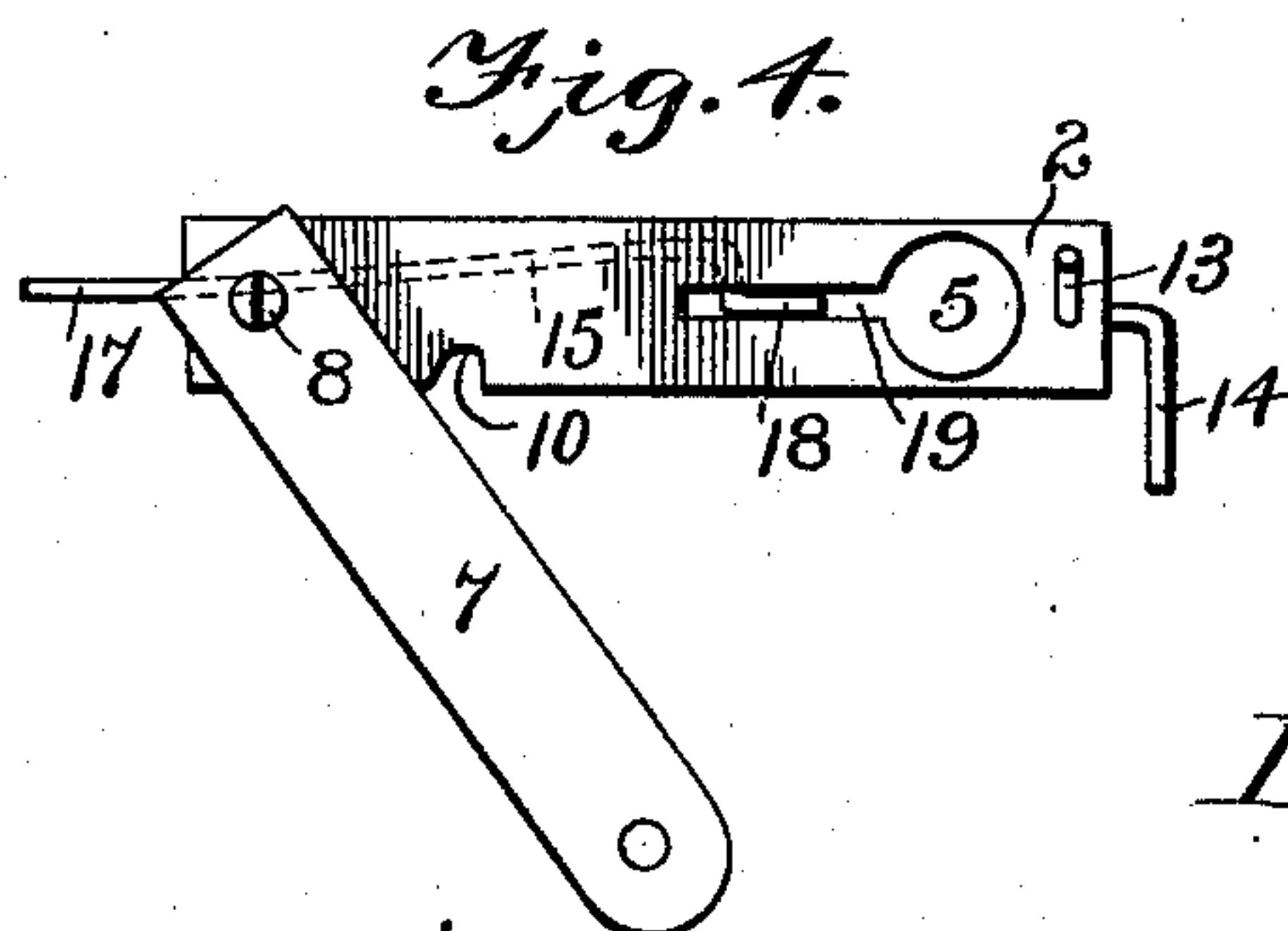
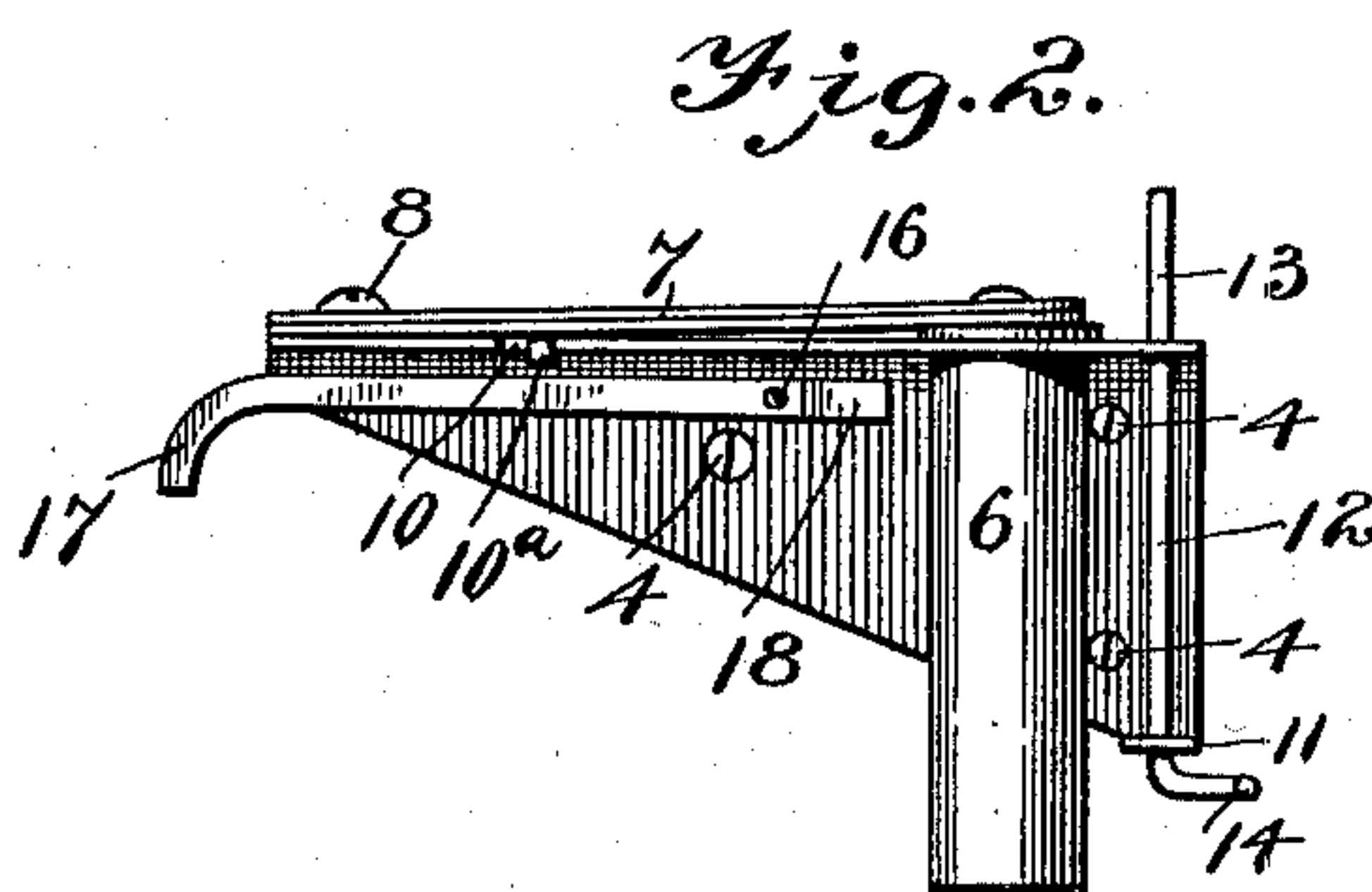
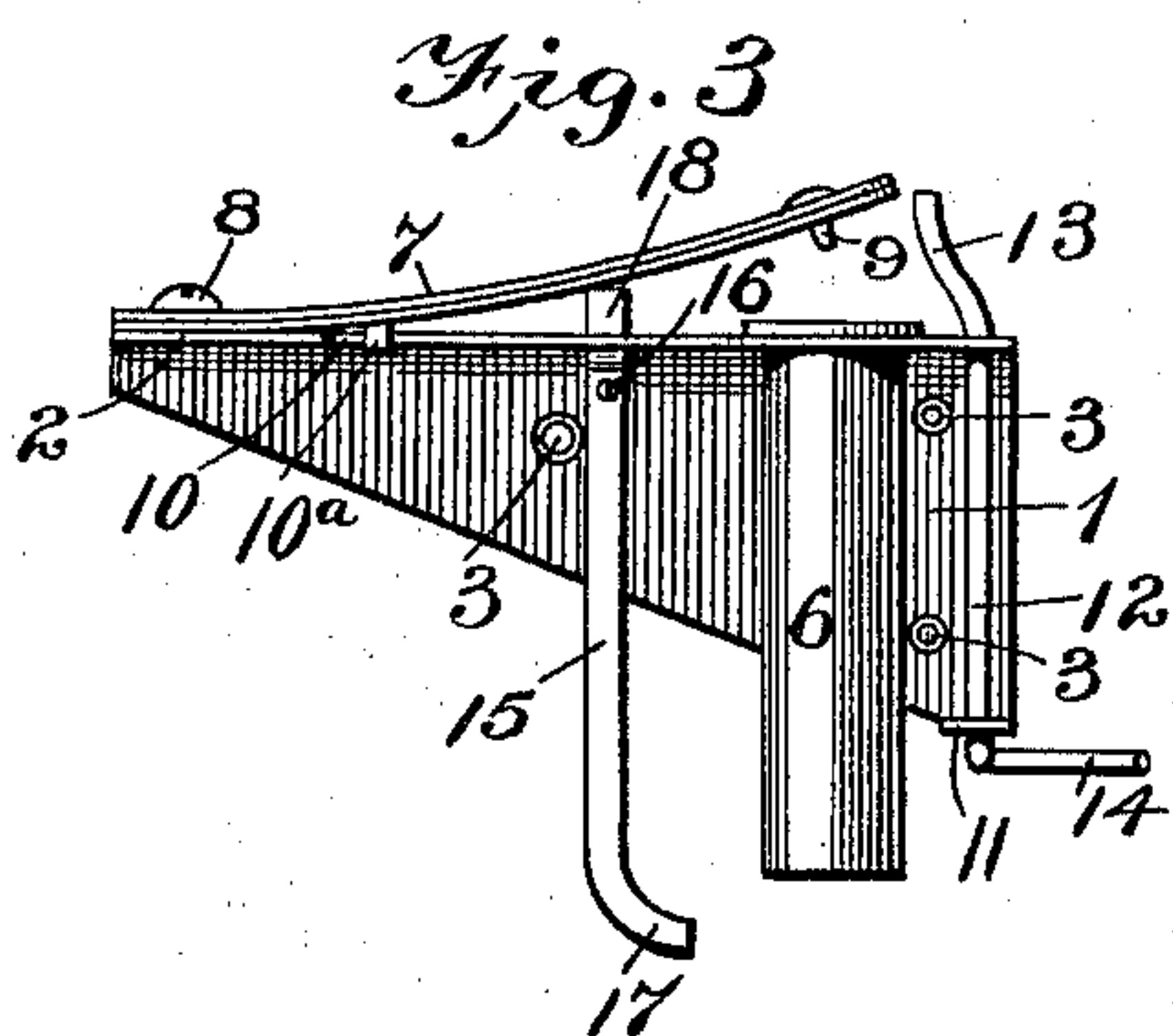
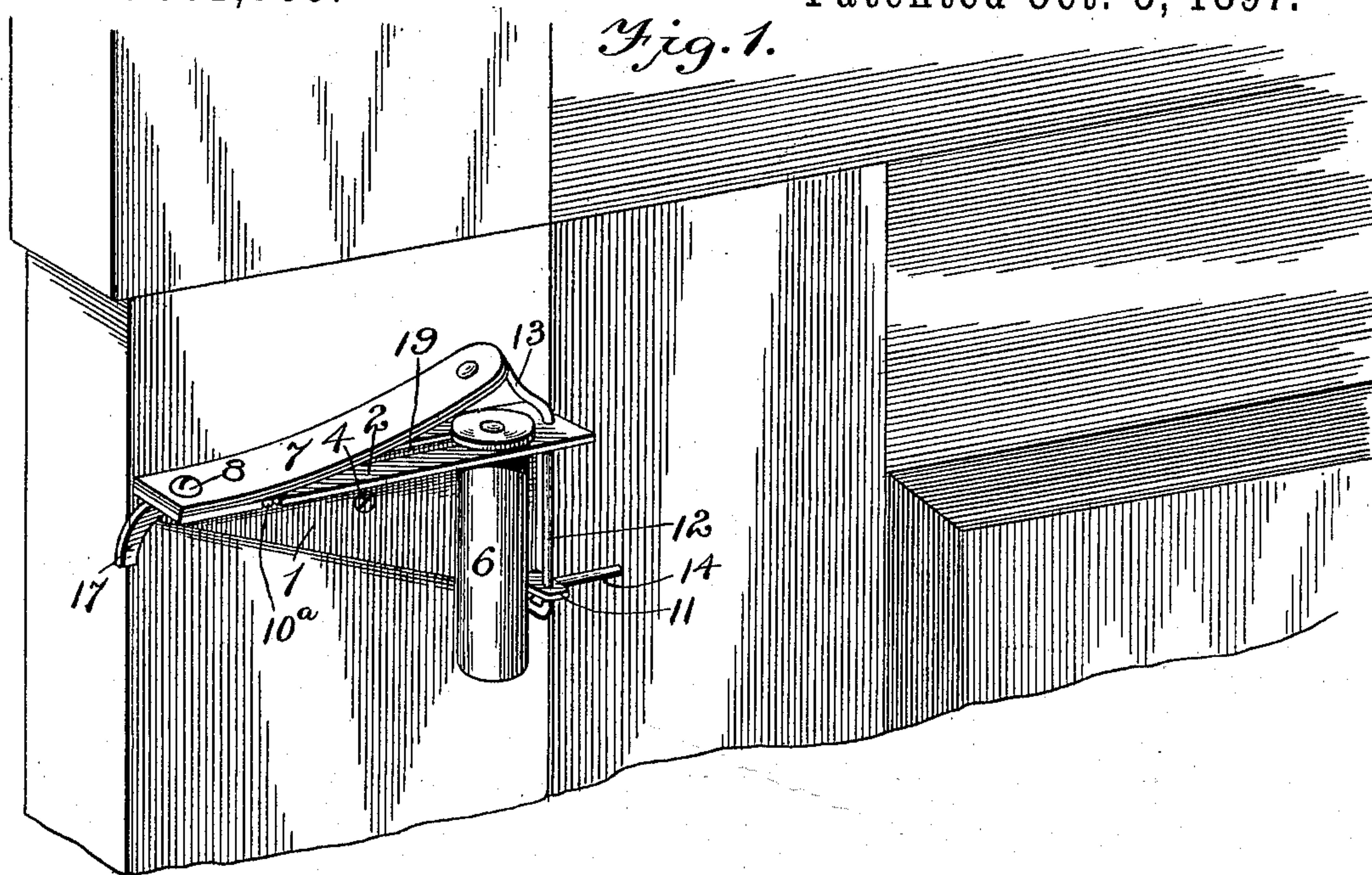


(No Model.)

L. M. PRATT.
BURGLAR ALARM.

No. 591,055.

Patented Oct. 5, 1897.



Witnesses
Edwin G. McKee
Edwin Cruise.

By his Attorneys,

Inventor
Lewis M. Pratt.

Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

LEWIS M. PRATT, OF BELLEVILLE, KANSAS, ASSIGNOR OF ONE-HALF TO
J. A. BOYD, OF SAME PLACE.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 591,055, dated October 5, 1897.

Application filed May 22, 1897. Serial No. 637,759. (No model.)

To all whom it may concern:

Be it known that I, LEWIS M. PRATT, a citizen of the United States, residing at Belleville, in the county of Republic and State of Kansas, have invented a new and useful Burglar-Alarm, of which the following is a specification.

This invention relates to certain improvements in burglar-alarms, the object being to provide a simple, cheap, and efficient device of this character adapted to be attached to a door or window frame in such a manner that the opening of the door or window will cause the explosion of the cartridge.

The invention consists in the several details of construction and combination of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In order that my invention may be understood, I have in the accompanying drawings illustrated the alarms attached to a door.

In the drawings, Figure 1 is a perspective view of a portion of a door and door-frame, showing my improved burglar-alarm in position set. Fig. 2 is a side elevation of the alarm tripped. Fig. 3 is a similar view showing the spring-hammer raised by the lever preparatory to setting the alarm. Fig. 4 is a top plan view of the alarm, showing the spring-hammer swung to one side to permit the insertion of a cartridge.

Similar reference-numerals indicate similar parts in the several figures.

The supporting-frame preferably consists of an angle-iron the vertical member of which is indicated by 1 and the horizontal member by 2. The vertical member is provided with a series of countersunk holes 3 for the reception of screws 4 or other similar fastening devices, by means of which the supporting-frame may be attached to a door or window frame. The horizontal member 2 projects forwardly from the top edge of the vertical member and is of sufficient width to have an opening 5 formed therein to receive and support an ordinary gun-cartridge 6. This opening 5 is formed near one end of the supporting-frame, which, for the sake of distinction, will be termed the "front" end.

7 indicates a flat plate-spring secured at one end to the rear end of the horizontal mem-

ber 2 of the frame by means of a screw or bolt 8. The connection of the spring to the supporting-frame will be sufficiently loose to permit the spring to turn on the bolt or screw 8 in order that the opening 5 in the frame may be exposed for the removal and insertion of cartridges. The free end of the spring 7 extends across the opening 5 and is provided with a pin 9 on its lower face which is adapted to strike the cap in the cartridge and thereby cause the cartridge to explode. The horizontal member 2 of the frame is provided with a recess 10 in its front edge adapted to receive a stud 10^a on the spring 7 to limit the inward movement of the latter in order that the pin 9 may be in proper position over the cartridge.

The vertical member of the supporting-frame is provided near its front edge with a forwardly-projecting ear 11, and this ear and the horizontal member 2 of the frame are provided with alining perforations in which the trigger 12 is supported. This trigger is formed from a piece of wire, the upper end portion of which is bent to form a crank 13, which crank is arranged above the horizontal member of the supporting-frame. Below the ear 11 the wire is bent to form a substantially S-shaped portion 14, which extends in a horizontal plane.

15 indicates a lever pivoted at 16 to the vertical member 1 of the frame. The rear end of the lever is bent downwardly, as indicated at 17, to form a convenient finger-hold. Its front end is offset, as indicated at 18, and is adapted to work through an elongated opening 19 in the horizontal member 2 of the frame to engage the lower face of the spring 7.

In order to set the alarm, the free ends of the spring 7 will be lifted upward by means of the lever 17 and the crank portion 13 of the trigger be turned beneath it in order that the extreme upper end of the trigger will engage and form a support to hold the free end of the spring in its elevated position, and the lever will then be swung out of engagement with the spring and below the horizontal member of the frame. When thus arranged, the lower S-shaped part of the trigger will be in engagement with the closed door, and it is obvious that as soon as the door is opened the S-shaped portion will be moved and cause

the trigger to turn in its bearings and thereby release the upper end from engagement with the spring, thereby permitting the latter to descend with sufficient force to explode the
5 cartridge. In order to remove an exploded cartridge and insert a new one, the spring 7 can be turned on the screw 8 to one side, as indicated in Fig. 4, thereby exposing the opening 5 in the supporting-frame. By reference
10 to Fig. 4 it will also be seen that when the alarm is in its inoperative position the door may be opened and closed without interfering with any parts of the alarm mechanism.

This alarm may also be applied to be operated by a window-sash, drawer, or any similar movable device capable of actuating the trigger, as will be readily understood.

Having thus described the invention, what I claim is—

20 1. In a burglar-alarm, a supporting-frame consisting of an angle-iron, the vertical member of which is adapted to be secured to a fixed support, such as a door-frame, and a horizontal member having an opening adapted
25 to receive and support a cartridge, combined with a spring pivotally secured at one end to the said horizontal member and its free end extending over the cartridge-opening, a pin on the underside of the spring at its free
30 end adapted to engage the cartridge-cap, a lever pivoted on the vertical member of the frame with one end adapted to work through an opening in the horizontal member of the frame to engage the spring and lift it, and a
35 trigger pivoted on a vertical axis in the supporting-frame with its upper end adapted to support the free end of the spring in an elevated position, and its lower end to be engaged by a movable object, such as a door,
40 substantially as described.

2. In a burglar-alarm, a supporting-frame consisting of an angle-iron, the vertical member of which is adapted to be secured to a fixed support, such as a door-frame, and the horizontal member having an opening adapted
45 to receive and support a cartridge, combined with a spring secured at one end to the said horizontal member and its free end extending over the cartridge-opening, a pin on the free end of the spring adapted to engage
50 the cartridge-cap, and a trigger pivoted on a vertical axis in the supporting-frame, said trigger consisting of a piece of wire having its upper portion bent to form a crank adapted to be turned below the free end of the spring
55 when elevated, and its lower portion bent to form a substantially S-shaped horizontal portion adapted to be engaged by a moving object, such as a door, substantially as described.

3. In a burglar-alarm, a supporting-plate
60 adapted to be secured to a fixed support, such as a door-frame, and having an opening near one end to receive and support a cartridge, combined with a spring secured at one end to the said plate with its free end extending over
65 the cartridge-opening, a trigger pivoted on a vertical axis in the plate with its upper end adapted to support the free end of the spring in an elevated position, and its lower end to be engaged by a movable object, as a door,
70 and a lever pivoted intermediate its ends in an opening in the plate and adapted to lift the spring, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in
75 the presence of two witnesses.

LEWIS M. PRATT.

Witnesses:

A. O. BALDWIN,
J. T. JOHNSON.