

H. P. HOOD.
Burglar-Alarms.

No. 142,630.

Patented September 9, 1873.

Fig. 1.

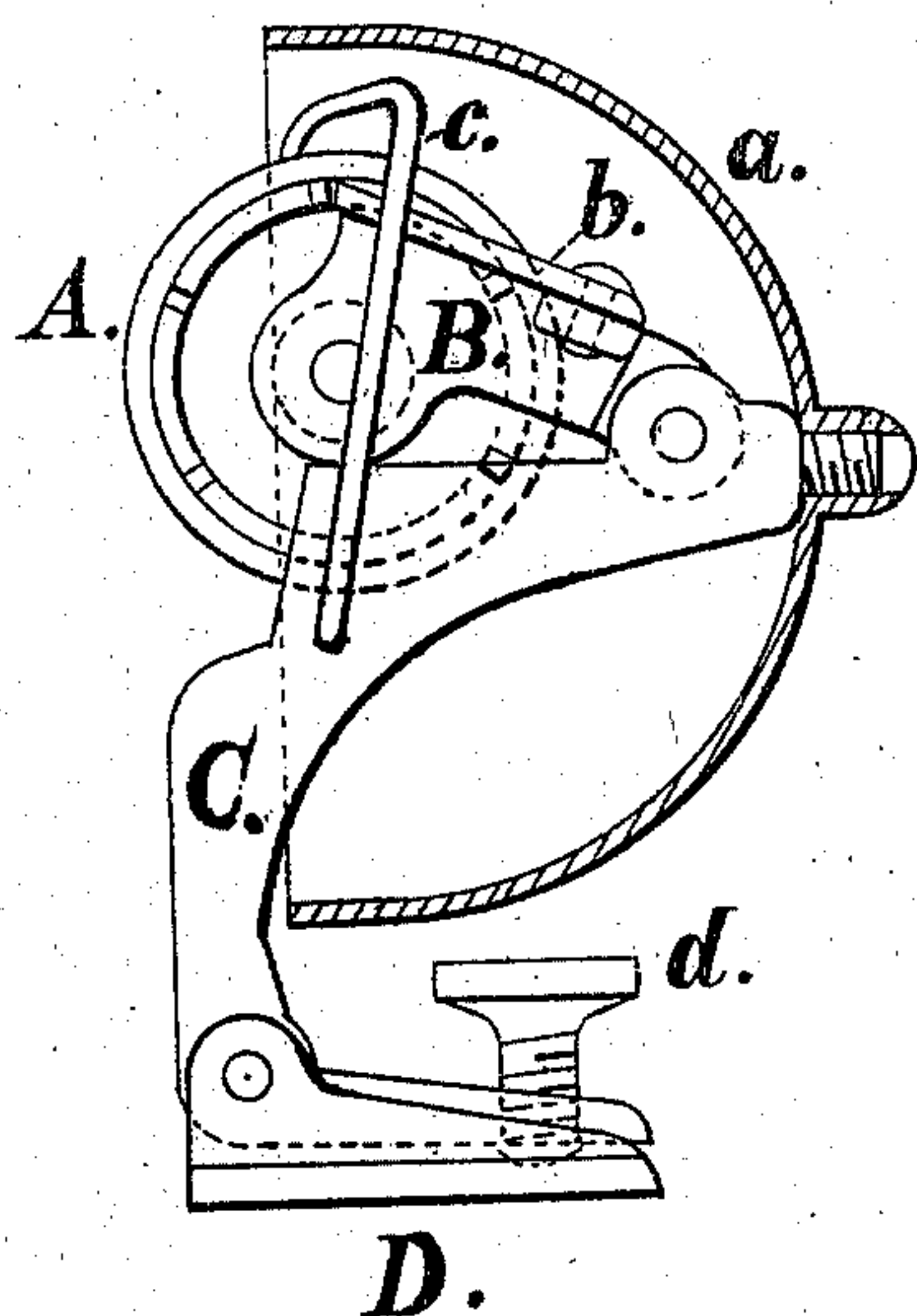
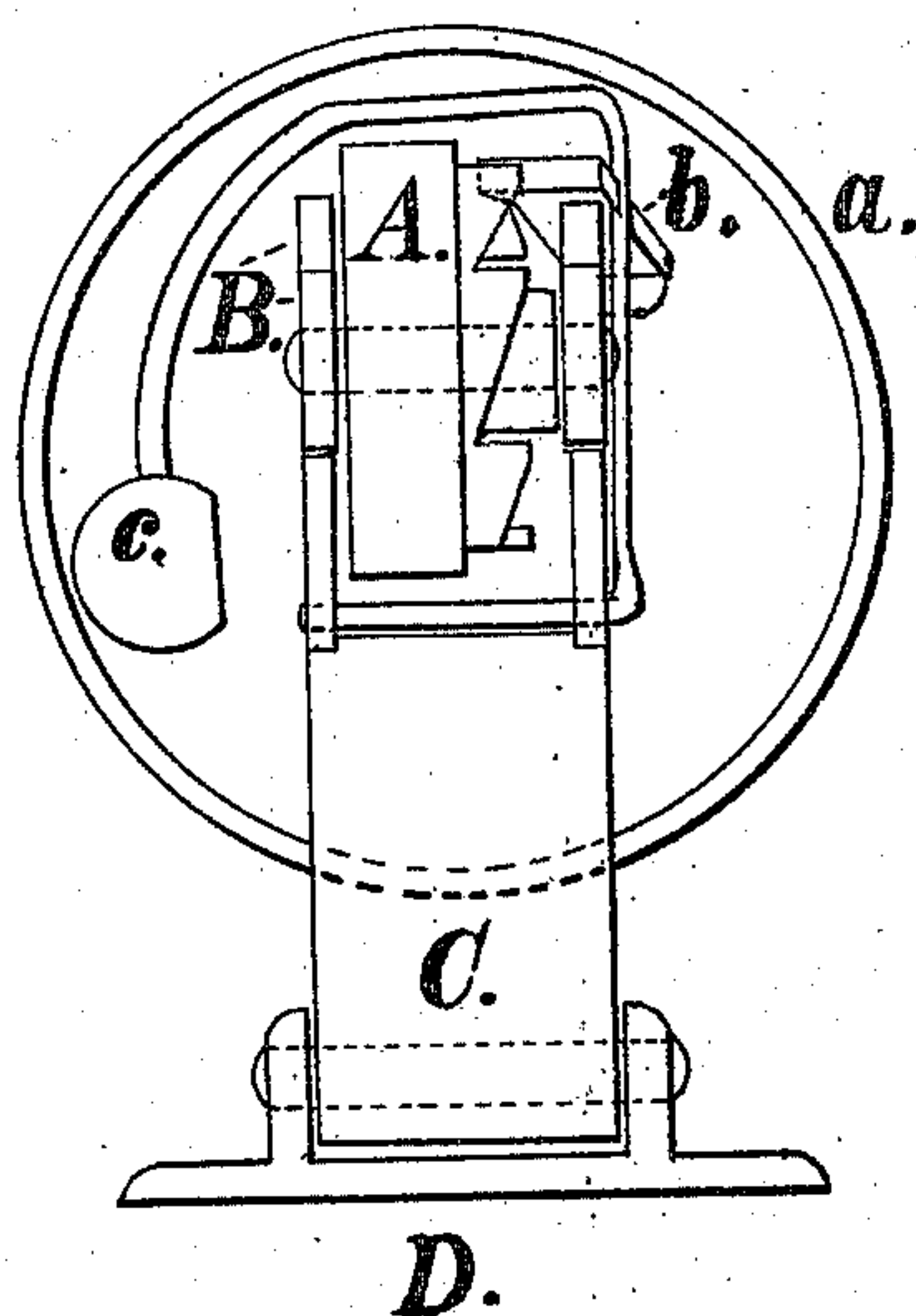


Fig. 2.



Witnesses ;

Charles A. Hoffmann
A. M. Ernberger

Inventor ;

Harrison P. Hood.

UNITED STATES PATENT OFFICE.

HARRISON P. HOOD, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF HIS RIGHT TO NELSON B. COOPER, OF SAME PLACE.

IMPROVEMENT IN BURGLAR-ALARMS.

Specification forming part of Letters Patent No. 142,630, dated September 9, 1873; application filed May 5, 1873.

To all whom it may concern:

Be it known that I, HARRISON P. HOOD, of Indianapolis, State of Indiana, have invented an Improved Burglar-Alarm, of which the following is a specification:

My invention relates to that class of burglar-alarms which are attached to a window or door, and are operated by the movement of the same; and consists in the construction and combination of the various parts, as hereinafter described.

Figure 1 is a side elevation with half the bell removed. Fig. 2 is a front elevation.

A is a wheel, having upon one of its sides ratchet-teeth, and provided with a tire, of rubber or other elastic material, which is secured in its place by its elasticity, being made considerably smaller than the wheel and forced over it. B is a swinging frame, in one end of which the wheel A has its bearings, and the other end of which is hinged to the standard C. C is a standard or support for the frame B and bell *a*, and is so constructed that the downward motion of the end of the frame B carrying the wheel A is arrested when in proper position for operation. *a* is a bell or gong, and is attached to the standard C, in such manner that it incloses the principal working parts. *b* is a pawl, which is attached to the frame B, and engages with the wheel A in such manner that its line of motion is nearly or quite at right angles with the line of motion of the wheel A. C is a spring-stem for the hammer; or it may form the hammer itself by coiling its free end in a compact mass. It is attached to the standard C at one end, and, passing upward in contact with the pawl *b*, over and partially around the frame B, limits its upward motion, and strikes the bell on the opposite side. D is a bed-plate, to which is hinged at one end the standard C, and serves as a means of attaching the whole device to the door or window. *d* is a set-screw, which has its nut in the foot of the standard C, and is designed to graduate the amount of pressure on the wheel A, or to remove said pressure altogether, at the will of the operator, by being forced against the bed-plate D or removed therefrom.

The operation of my device is as follows: When attached to a window, the bed-plate D having been secured to the lower sash, the elastic surface of the wheel A is brought in contact with the upper sash by means of the screw *d*, the outer end of the frame B resting by force of gravity on the standard C. Now, if either sash be opened, the wheel will roll along the upper sash, and, by means of the ratchets upon its side, give motion to the pawl *b* and spring-hammer *c*, causing a continuous ringing of the bell *a* so long as the window is being opened. On closing the window the pawl *b* will prevent the wheel A from turning, and it will consequently remain in its position until the end of the frame B has been raised until stopped by the spring-hammer *c*. The situation of the hinge which unites B to C is such that this upward motion of the end of the frame B carrying the wheel A draws the wheel away from the upper sash slightly, and thus relieves the sash from pressure, allowing it to slide freely and easily and without ringing the bell, and prevents excessive wear of the wheel-tire. When the window is opened again the frame B returns to its place automatically and the pressure is resumed. When it is desired to open the window by the inmates of the house, by releasing the set-screw *d*, the wheel is removed clear from the upper sash by force of gravity, and the bell is not rung. The operation on a door is similar.

I do not claim the operation of a burglar-alarm by means of a ratchet-wheel rotated by coming in contact with surrounding parts; but

I do claim—

In a burglar-alarm operated by a friction ratchet-wheel, the combination of the frame B with the standard or frame C, substantially as and for the purpose set forth.

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

HARRISON P. HOOD.

Witnesses:

CHAS. A. MOFFATT,
A. M. ERNSBERGER.