

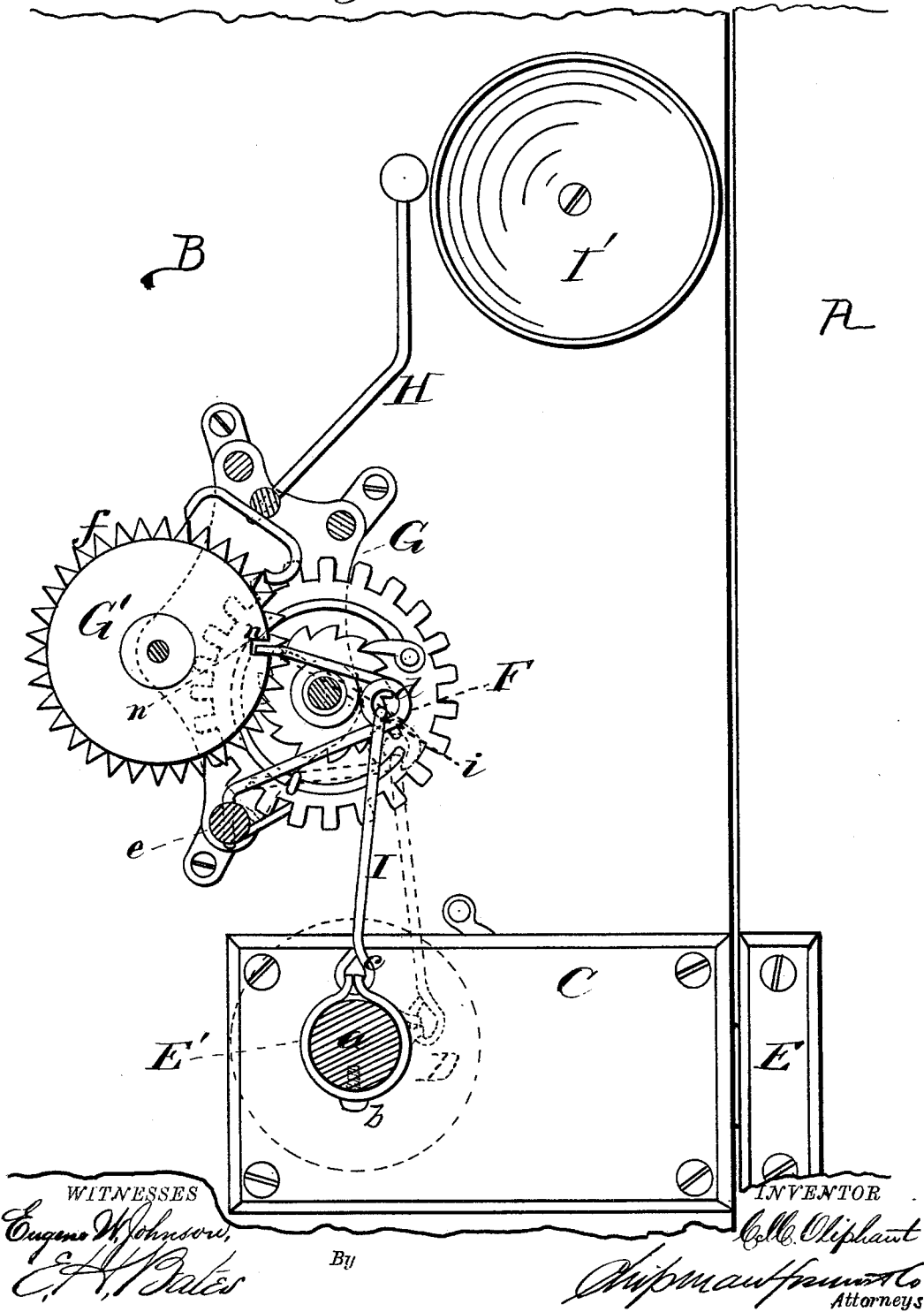
C. M. OLIPHANT.

BURGLAR ALARM.

No. 176,340.

Patented April 18, 1876.

Fig 1



UNITED STATES PATENT OFFICE.

CHARLES M. OLIPHANT, OF OSCEOLA, IOWA.

IMPROVEMENT IN BURGLAR-ALARMS.

Specification forming part of Letters Patent No. **176,340**, dated April 18, 1876; application filed August 21, 1875.

To all whom it may concern:

Be it known that I, CHARLES M. OLIPHANT, of Osceola, in the county of Clarke and State of Iowa, have invented a new and valuable Improvement in Burglar-Alarms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of my burglar-alarm mechanism.

This invention has relation to improvements in burglar-alarms, the object of which is to prevent persons from entering a building, either through a door or window, without giving notice to its occupants.

The object of the invention is to provide an alarm mechanism which shall be capable of being let off or sounded by the turning of the door-knob; also, in certain novel contrivances whereby, after the alarm is given, the hammering of the beater upon the bell shall be arrested, and the unused portion of spring-power preserved from running out.

The nature of the invention consists mainly in the combination of the parts, as will be hereinafter more fully set forth.

In the annexed drawings, A designates a door-frame, B a door hinged therein, and C a lock of the usual well-known construction, which is operated to withdraw a bolt in the said lock from a catch, E, on the door-jamb by means of a knob, D. This knob is of the usual well-known form, and has a reduced neck, *a*, upon which is arranged a metallic collar, E', of suitable strength, which collar is provided with an aperture through which is passed a screw, *b*, by means of which the collar is prevented from rotating independently of the knob. The ends of this collar are united by means of a hook, *c*, on one end of a connecting rod, I, to the detent F of an ordinary clock-work alarm-mechanism, G, which is secured to the inside of door A, and is provided with a hammer, H, operating upon a bell, I', which is also secured to the door in striking distance of the said hammer. Detent F, before alluded to, is made by bending a suitable spring-wire so as to form an eye or open coil, *d*, and is of angular form. One of the ends of the legs of the

detent is rigidly secured to the stationary shaft *e* of the alarm-frame, and the other is held by spring-action in continuous but yielding contact with a disk, G', secured upon the shaft of escapement-wheel *f*, and revolving therewith. When the spring is allowed to actuate the hammer, by means hereinafter apparent, the free end of alarm-detent F will be sprung into a notch, *n*, in the disk G', when the latter is brought around by the rotation of the escapement-shaft into line with the former. The movement will thus be locked, and the actuation of the hammer suspended; consequently, the unexpended force of the mainspring will be held in reserve for a subsequent operation of the alarm.

The rod I is provided upon its free end with a hook, *i*, by means of which it is detachably connected with eye *d* of detent F, and if the said hook be engaged with the eye of the detent, and the door opened by turning the knob, the end of the free arm of the said detent will be disengaged from the notch in the disk G', thus allowing the mainspring to actuate the hammer until the said disk shall have made a complete revolution, when the re-engagement of the disk and detent will again arrest the movement and silence the alarm.

Every subsequent turning of the knob will cause an alarm, until the power of the spring is expended, when it must be again wound up. It is evident that the alarm above described may be used in connection with window-blinds and sashes with very slight and unimportant modifications.

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

In a burglar-alarm the angular spring-wire detent F, having the coiled eye *d*, one of the ends of which is rigidly attached to the stationary shaft *e*, and the other end held by spring-action in contact with the notched disk G', in combination with the escapement-wheel *f* and hammer H, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES M. OLIPHANT.

Witnesses:

JNO. J. STEADMAN,
S. M. LEACH.