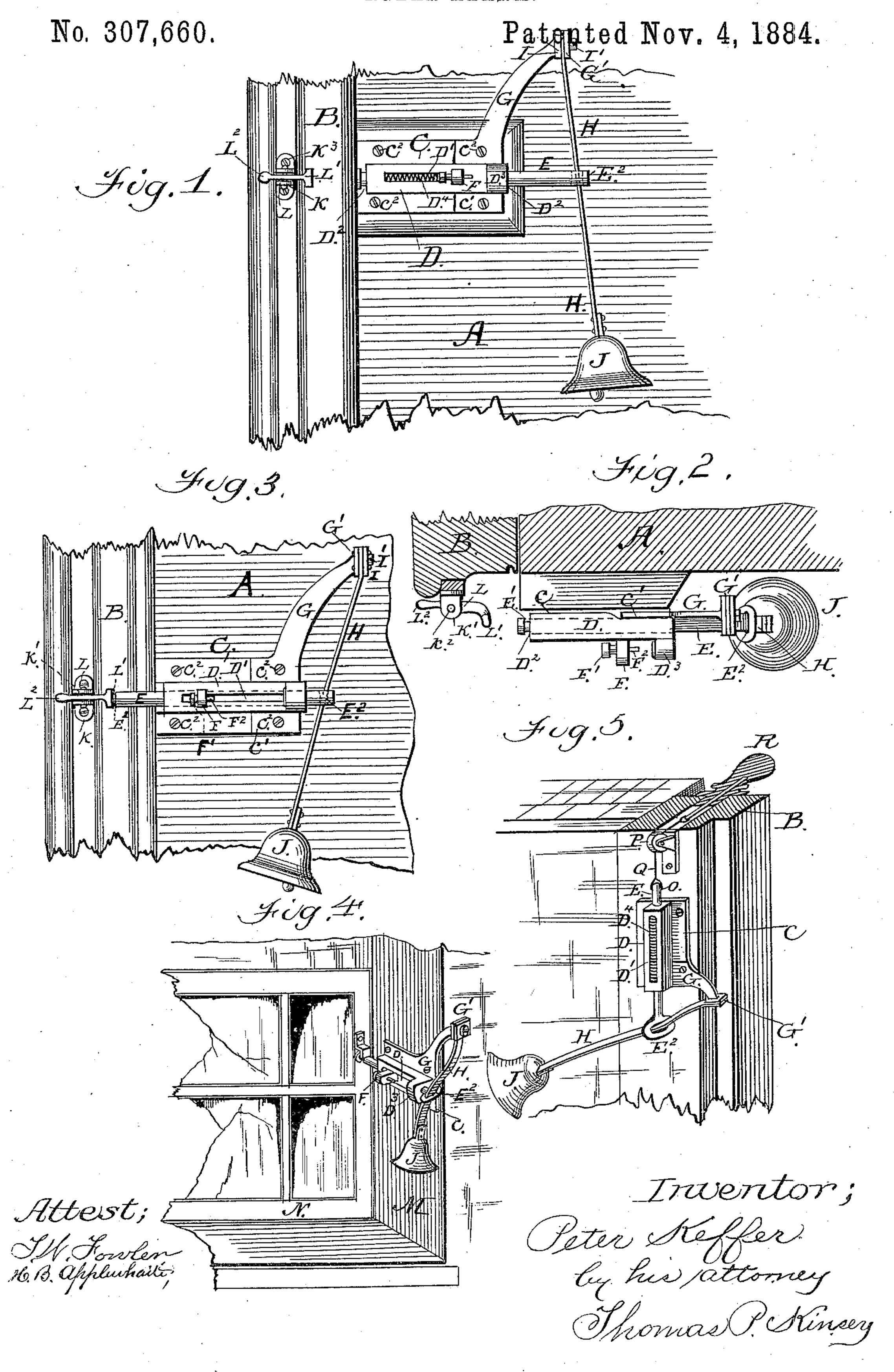
P. KEFFER.

BURGLAR ALARM.



United States Patent Office.

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BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 307,660, dated November 4, 1884.

Application filed April 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, Peter Keffer, a citizen of the United States, residing at the city of Reading, county of Berks, State of Pennsylvania, have invented a new and useful Improvement in Burglar-Alarms, of which the following is a specification.

This improvement relates to that class of burglar-alarms which are adjusted each time to they are desired to operate as an alarm, and at all other times are not affected by the opening of the article to which they are attached.

The object of the invention is to place within the means of all a cheap and effective burglar-alarm, which may be attached to doors, windows, and transoms, and so adjusted relative thereto that the opening of the same shall fire off a cap and ring a bell with noise enough to waken all ordinary sleepers.

The drawings herewith forming a part of this specification are detailed sufficiently for an expert to grasp the idea, similar letters of reference indicating similar parts throughout.

Figure 1 is a front view of the alarm as applied to a door, and, as represented, would not cause any alarm upon the opening of the door. Fig. 2 is a plan, looking down on the same as secured to the door. Fig. 3 represents the alarm as set. The opening of the door will release the catch and sound the alarm. Fig. 4 is a view of the alarm applied to a window-sash. Fig. 5 represents it as applied to a doorpull.

A represents the door; B, the door-frame; 35 C, the bolt keeper plate; C', lap-recesses on opposite sides of the case; C2, securing-holes; D, bolt-case; D', slot in the same; D2, bolt-apertures; D³, anvil for explosive; D⁴, spiral spring; E, bolt; E', locking-recess; E2, spade 4c handle head, within which the bell-spring is loosely held; F, thumb-piece; F', nipple adjusting screw; F2, nipple for exploding caps placed in the anvil; G, reversible arm supporting the alarm-bell; G', head to the same; 45 H, bell-spring; I, a clamp; I', clamping-screw to secure bell-spring; J, the alarm-bell; K, catch-bracket; K', jaws to same; K2, fulcrum for catch; K3, securing-holes; L, catch; L', bifurcated end to grasp the bolt in the recess or 50 neck E', and L2 thumb end of same.

A modified form of application of the invention is shown in Figs. 4 and 5, in which M is the side of a window-frame; N, the sash; O, a hole in the end of the bolt in lieu of recess E' when used for a door-pull; P, leading-pulley; 55 Q, bell-wire, and R door-pull.

I am aware that burglar-alarms of this class are not uncommon; but I believe that I have by my arrangement and adaptation of parts secured an alarm so cheaply constructed and 60 so easily applied that its use will become universal.

The construction is so fully shown in Figs. 1 and 2 that little remains for explanation. The keeper-plate is cut down or recessed at 65 the bell end on both sides of the bolt-case. This adapts the plate and apparatus to either a right or left hand door, the bell-arm fitting within the recess upon either side of the boltcase. The locking-catch in the same way is 70 adapted to retain the bolt upon either side of the door. When placed in windows, a simple knee will be screwed against the sash, which will have its projected end turned slightly down to catch in the recess E', and when the 75 sash is raised it will carry the knee-piece along, thus releasing the bolt and giving the alarm. When used as a door-bell, the catch is not required, and a hole will be drilled in the end of the bolt, in which the wire will be secured 80 that is led to the bell-pull or to any rooms in the house by sheaves and bell-cranks, in the usual manner. The anvil D³ is bored to suit an ordinary pistol cap or cartridge, and the adjusting nipple screw F' is projected through 85 the thumb-piece, and has its forward end of the proper shape to explode the cartridge on coming in violent contact therewith. The spring D⁴, I prefer to make of spring-steel. It is sprung over the bolt E, and confined be- 90. tween the thumb-piece F and the end of the bolt-case.

The operation is easily understood. The keeper-plate is secured to the inner face of the door on the lock side, and when in position the 95 bolt E is drawn out toward the frame and the position of the recess E' marked thereon. The catch-plate is then secured to the frame in such position that the bifurcated end of the catch will be in line with the mark indicating the 100

recess E' of the bolt E. This being done, the bolt is again drawn or shoved toward the catch, which is caught in the recess, and will so remain as long as the door is unopened. While 5 in this position, a cartridge is inserted in the anvil D³. Now, on opening the door, the bolt will be released from the catch, and the resistance of the compressed spring D⁴ will throw the bolt toward the anvil D³, and the nipple striking the cartridge, it will explode. At the same time the bell, being set free, will ring for some time, and the operations of burglars will thus be foiled.

Having shown my improvement, its construction and advantages, I desire to secure by Letters Patent the following claims thereon:

1. In combination with a burglar-alarm spring-bolt adapted to explode a percussion cap or cartridge, the bolt-case D, thumb-piece 20 F, provided with an adjustable screw-nipple, F' F², the anvil D³ of the bolt-case, recess E' of the bolt E, spring D⁴, and reversible catch

L, the whole arranged and combined as shown, and for the purpose set forth.

2. In combination with a burglar-alarm 25 bolt, as described, the seat or recess C' of the bolt keeper plate, the reversible arm G, provided with head G', clamp I, and clamping-screw I', the spade handle head E² of the bolt E, bell-spring H and bell J, recess E', and 30 catch L, all combined and adapted to be operated as and for the purpose specified.

3. In combination with a burglar-alarm spring-bolt, as described, the thumb-piece F, with its adjustable nipple F' F², anvil D³, recess E', catch L, reversible arm G, and bell J, suspended from reversible arm G, its vibrating spring H being loosely held in the spade handle head E², as and for the purpose substantially shown and set forth.

PETER KEFFER.

Witnesses:

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