

J. SEELHORST, JR.
DOOR OR OTHER ALARM.
APPLICATION FILED DEC. 22, 1908.

942,593.

Patented Dec. 7, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

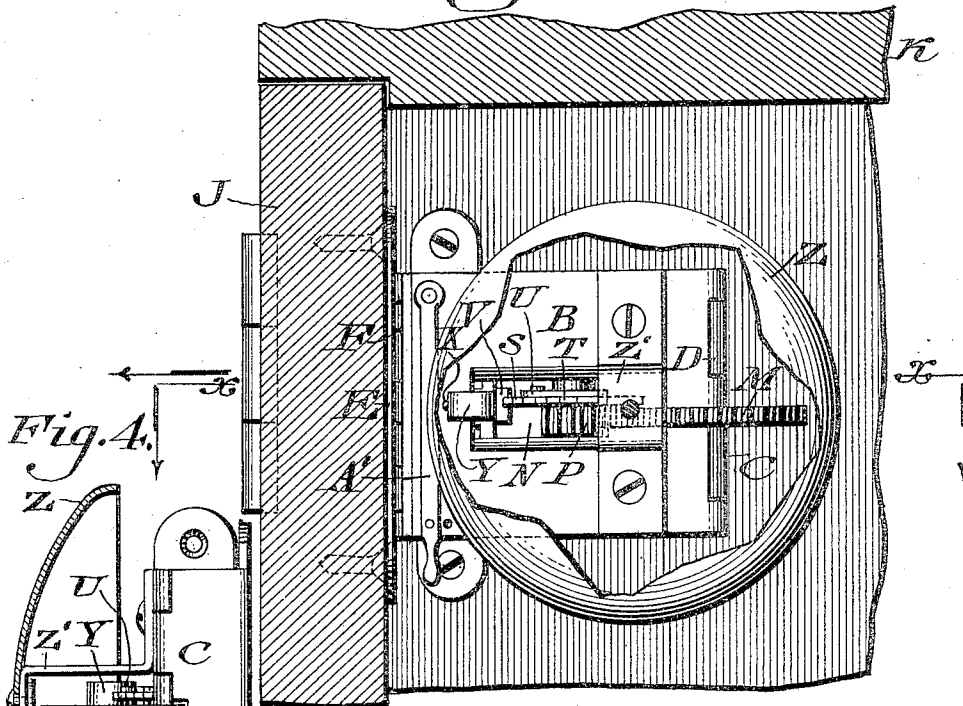


Fig. 4.

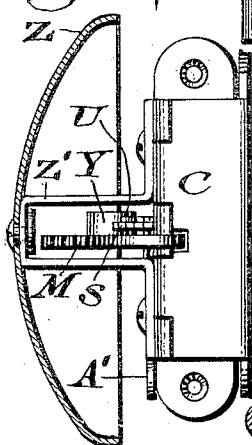


Fig. 2.

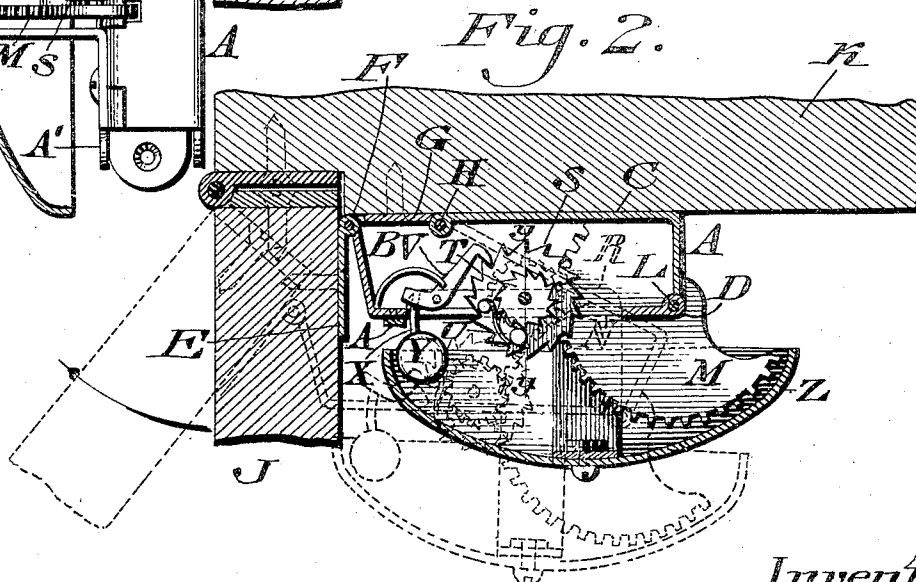
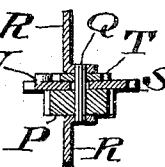


Fig. 3.

Witnesses
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Fig. 5.

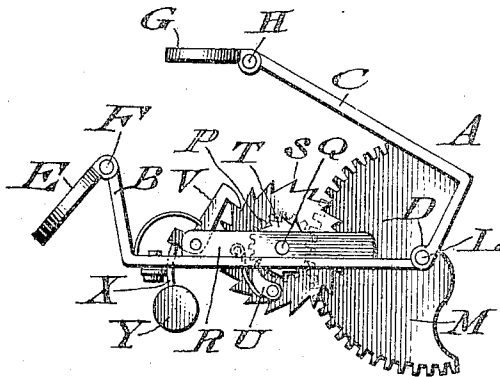
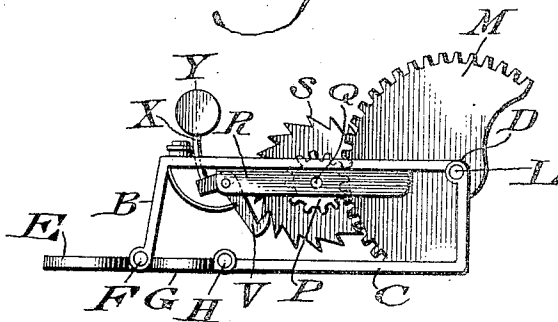


Fig. 6.



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UNITED STATES PATENT OFFICE.

JULIUS SEELHORST, JR., OF CAMDEN, NEW JERSEY, ASSIGNOR OF ONE-HALF TO
CHRISTIAN KULL, OF PHILADELPHIA, PENNSYLVANIA.

DOOR OR OTHER ALARM.

942,593.

Specification of Letters Patent.

Patented Dec. 7, 1909.

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To all whom it may concern:

Be it known that I, JULIUS SEELHORST, Jr., a citizen of the United States, residing at Camden, county of Camden, State of New Jersey, have invented a new and useful Door or other Alarm, of which the following is a specification.

My invention consists of a bell or gong adapted to be connected with a door, shutter, etc., and having the mechanism thereof operated by the opening of the same, said mechanism being hereinafter described and the novel features pointed out in the claims.

For the purpose of explaining the invention, the accompanying drawings illustrate a satisfactory reduction of the same to practice, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific arrangement and organization shown and described.

Figure 1 represents a side elevation of a door bell embodying my invention. Fig. 2 represents a section thereof on line $x-x$. Fig. 3 represents a section on line $y-y$, Fig. 2. Fig. 4 represents an elevation of a portion at a right angle to Fig. 1, including a section of the bell. Fig. 5 represents a top or plan view of a portion of the device in the open condition of a door, etc. Fig. 6 represents a bottom plan view of the portion shown in Fig. 4 in the closed condition of the door, etc.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings:—A designates an articulated frame, which is composed of the angular leaves B and C and the knuckle D pivotally connecting the same. The leaf B is pivotally connected with the butt E by the knuckle F, and the leaf C is pivotally connected with the butt G by the knuckle H, said butt E being screwed or otherwise stationarily connected with the door J, and said butt G being screwed or otherwise stationarily connected with the door jamb or frame K.

Mounted on the pintle L and firmly secured to the leaf C is the toothed member in the form of a segment or section M, which is adapted to enter an opening N in the leaf B and mesh with the pinion or gear wheel P, whose shaft Q is mounted on bearing pieces R connected with the leaf B, said shaft having loosely mounted on it

the ratchet S, and firmly connected with it the ratchet T.

On the side of the ratchet S is the spring-pressed pawl U, whose nose is adapted to engage with the teeth of the ratchet T, so as to couple the ratchets, whereby the ratchet T imparts motion to the ratchet S in one direction of rotation of the pinion P, but in the other direction of rotation thereof said ratchet T rides freely on said pawl U without imparting rotation to said ratchet S.

V designates a spring-pressed oscillating lever, which is mounted on the bearing pieces R and has one limb engaged with the contiguous tooth of the ratchet S, and the other limb carrying the arm X of the bell hammer Y, the latter being adjacent to the bell or gong Z so as to strike the same, said bell or gong being connected by the bracket Z' with the leaf B.

The operation is as follows:—The door is opened, when the butt E follows the same. This draws out the leaf B, and consequently the leaf C, while the butt G remains stationary on the jamb or frame K. As the segment moves out with the leaf C, it rotates on the pintle L and so imparts motion to the pinion P and ratchet T. The pawl U is carried around with the latter and so imparts rotation to the ratchet S, whereby the lever V is tripped by said ratchet S and owing to its oscillations the hammer strikes the bell or gong and so rings the same or sounds an alarm. In closing the door, the frame and mechanism thereon return to their normal positions, when as the pinion P, and consequently the ratchet T, rotate in reverse order, said ratchet rides freely over the pawl U, whereby the ratchet S is not operated, and thus the bell hammer remains at rest, so that the bell or gong is not rung, it being noticed that the ratchet S is held immovable by the engagement therewith of the nose of the tripping lever V. It is evident that the device is applicable to a screen or other door, as well as to a window shutter or other movable object where a bell or alarm is serviceable. When it is not desired to ring the bell or sound an alarm, I employ the lever A' which is suitably connected with the frame A and adapted when operated in one direction to move the arm X, so as to throw and hold the lever V out of gear with its operative mechanism, whereby while the door, shutter, etc. may be opened

and closed as usual, the hammer Y remains at rest, and so the bell is not struck.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a bell or alarm, a toothed member movable with and adapted to be operated by a swinging object, a gear wheel in engagement with said member, a plurality of ratchets, one of which is fixed to said wheel, and the other one of which is loose therefrom, means for coupling said ratchets so as to rotate together in one direction of motion of said gear wheel, and a tripping device carrying a bell hammer and adapted to be engaged by the loose ratchet and hold said ratchet inoperative.

2. In a bell or alarm, an articulated frame, a butt pivotally connected with one of the members thereof and adapted to be stationary attached to a movable object, a butt pivotally connected with another member of said frame and adapted to be attached to a stationary object, and mechanism for operating a bell hammer mounted on one of the members of said frame.

3. In a bell or alarm, mechanism and a bell hammer adapted to be operated by the same, and a frame operative by a movable object carrying said mechanism, said frame

being composed of pivotally united articulated members, means for pivotally connecting one of said members with said object, and means for pivotally connecting another member with a stationary object the members of said frame being movable in unison upon their pivots.

4. A bell or alarm consisting of an articulated frame, a toothed member mounted at the junction of two members of said frame and movable with one of said members, a gear wheel with which said toothed member is adapted to mesh, a plurality of ratchets, a shaft carrying said wheel and ratchets, said wheel and one ratchet being fixed and the other ratchet being loose on said shaft, a pawl on the loose ratchet, the same being adapted to be engaged by the fixed ratchet, an oscillating lever engaged by the said loose ratchet, to couple the ratchets when the frame members move in one direction and to hold the loose ratchet immovable when the parts move in the opposite direction and a bell hammer carried by said lever.

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