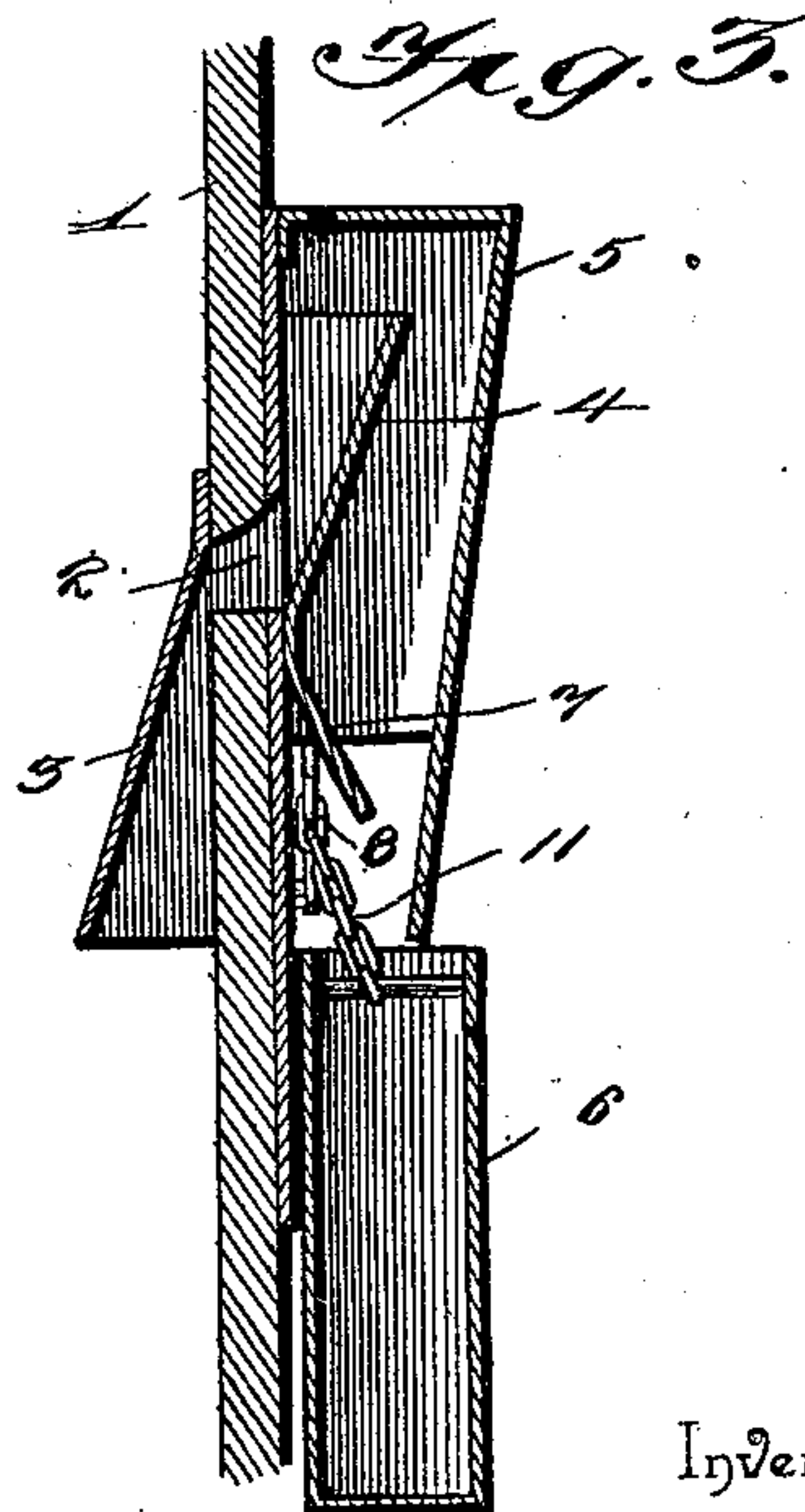
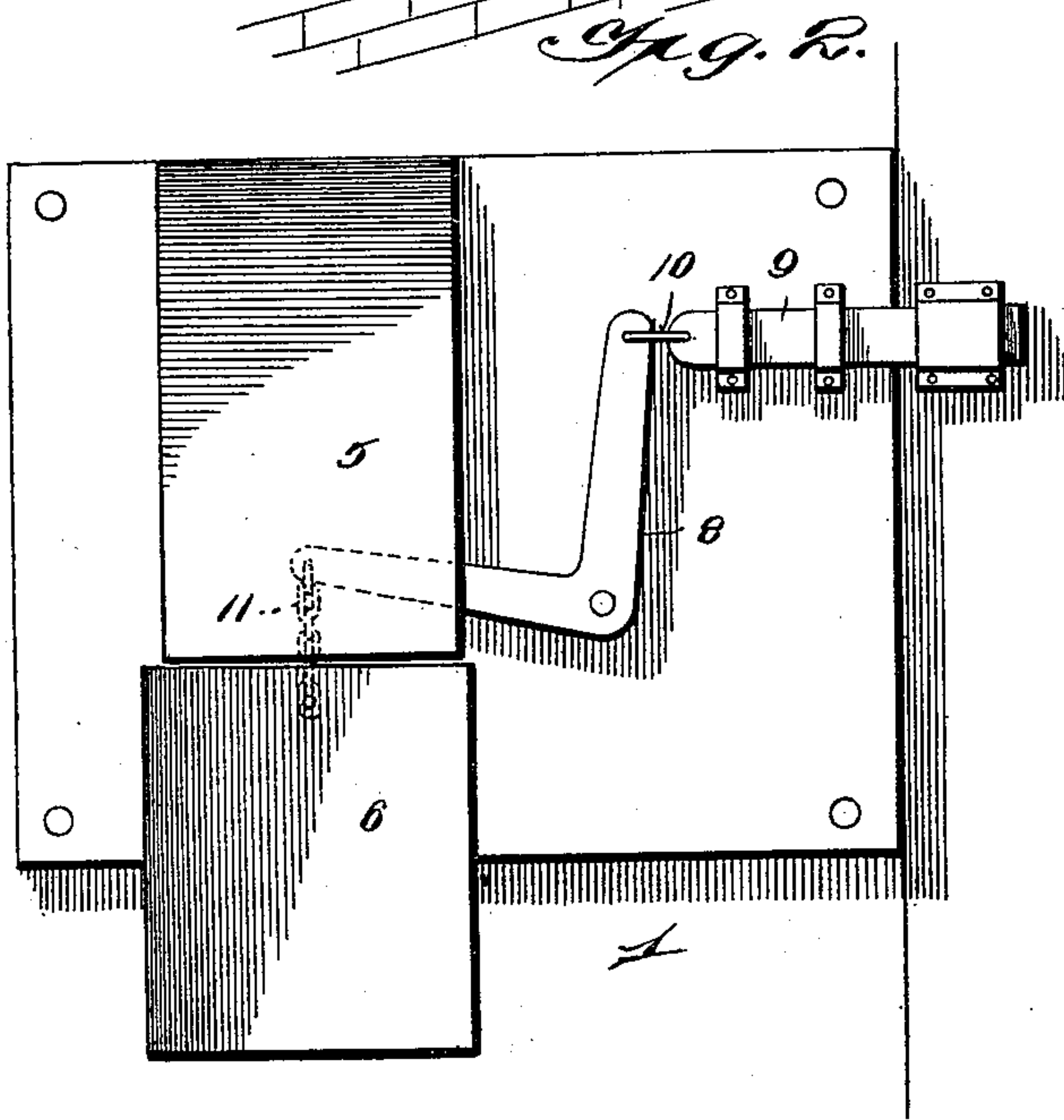
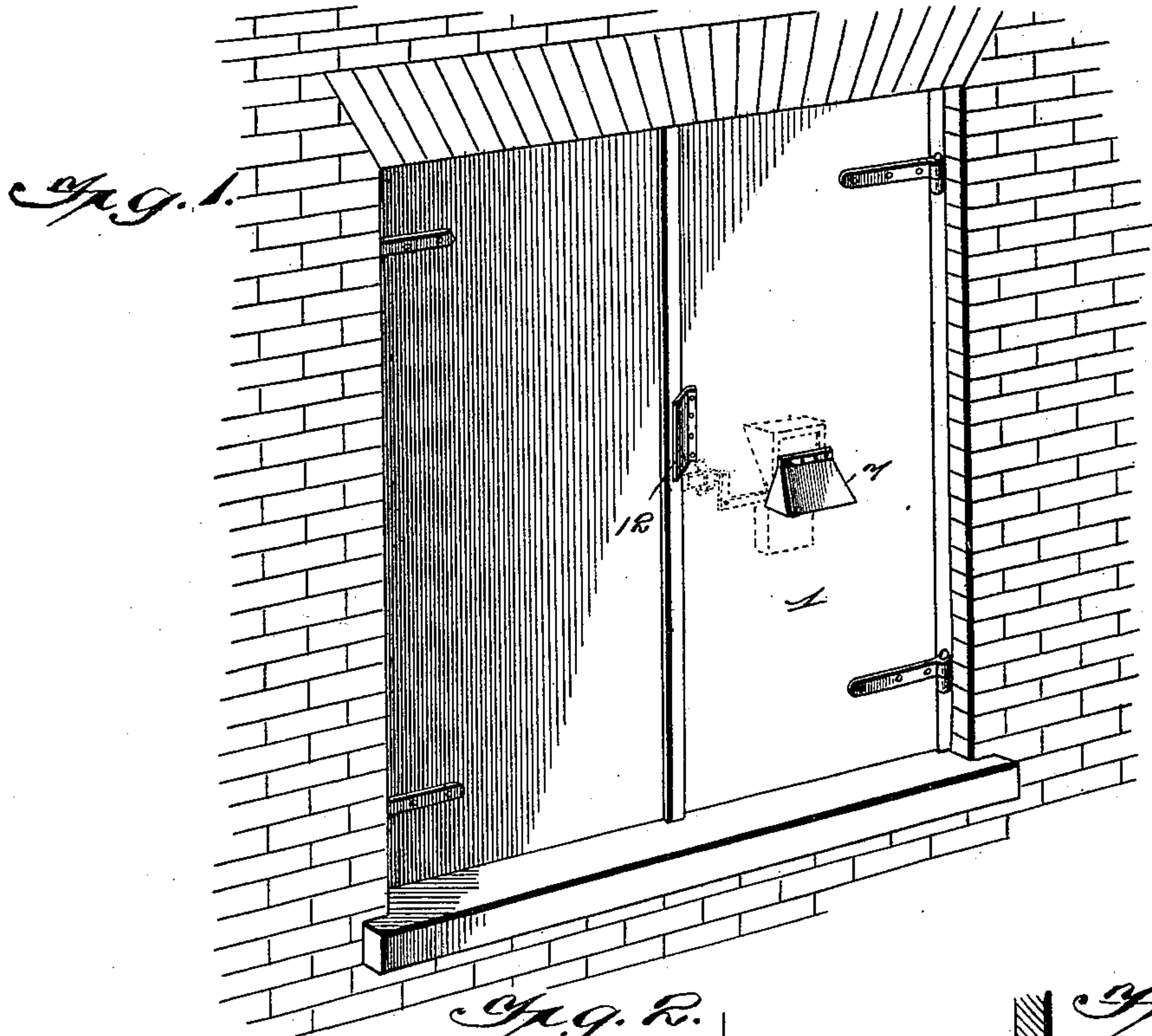


(No Model.)

W. B. EICHHOLTZ.  
SHUTTER OPERATOR.

No. 583,849.

Patented June 1, 1897.



Inventor  
*William B. Eichholtz*

Witnesses  
*W. J. Noerth.* By his Attorneys,  
*C. E. Noerth.*

*C. A. Snow & Co.*



# UNITED STATES PATENT OFFICE.

WILLIAM B. EICHHOLTZ, OF NEW ORLEANS, LOUISIANA.

## SHUTTER-OPERATOR.

SPECIFICATION forming part of Letters Patent No. 583,849, dated June 1, 1897.

Application filed October 31, 1896. Serial No. 610,723. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM B. EICHHOLTZ, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and useful Shutter - Operating Device, of which the following is a specification.

My invention relates to a shutter-bolt-disengaging apparatus adapted to be applied to solid shutters, such as those employed in connection with warehouses, storage-buildings, and the like; and the object in view is to provide means whereby a shutter may be opened from the outside by means of a stream of water from a fire-hose to give access to the interior of the building.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of an apparatus embodying my invention applied in the operative position to a shutter. Fig. 2 is an inside view of the same, showing the apparatus in its locked position. Fig. 3 is a vertical sectional view of the same.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The shutter 1 is provided with an opening 2, which is preferably elongated horizontally, and covering the same and secured to the exterior surface of the shutter is a hood 3, enlarged or flared toward and open at its lower side to admit a stream of water applied by a fire-hose and adapted to direct the same into the opening 2. Covering this opening at the innerside of the shutter is an upwardly-flared shield 4, open at its upper side and designed to prevent the insertion of a wire or other device through the opening 2 to tamper with the shutter-locking mechanism. Secured to the shutter and inclosing this shield is a guard 5, which is reduced toward its lower open side and is adapted to discharge into a bucket or receptacle 6, located contiguous to its lower side, and is preferably arranged within the mouth of the bucket or receptacle. The wall of the shield is extended downwardly and inwardly or toward the guard 5 to form a deflector 7, which combines with the lower por-

tion of the wall of the guard to direct the water introduced through the hood into the bucket or receptacle 6. This bucket or receptacle is supported by a bell-crank lever 8, having one arm connected to a locking device, such as a bolt 9, suitable loose or flexible connections 10 and 11 being employed to connect the arms of said lever, respectively, with the bolt and bucket. Under ordinary circumstances the weight of the bucket or receptacle is insufficient to affect the bolt, said bucket being held elevated, as indicated in Fig. 2; but when it is desired to open a shutter from the outside a stream of water from the fire-hose is directed against the outer face of the shutter under the hood and is conducted by the shield 4 and guard 5 into the bucket or receptacle until sufficient weight has been accumulated to draw the bolt and release the shutter. In order to open the shutter after its release, I employ a deflecting-plate 12, secured to the exterior surface of the shutter and depressed at an angle of approximately thirty degrees thereto, and the force of water thrown by a fire-hose against the inclined surface of this plate is sufficient to swing the shutter to its open position.

From the above description it will be seen that the apparatus is simple and, while facilitating the opening of a shutter from the outside, is adapted to prevent tampering with the locking device by the means ordinarily employed for that purpose.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. The combination with a shutter having an opening, of an exterior downwardly-flared hood covering said opening and adapted to receive a stream of water discharged by a fire-hose to guide the same into the opening, a guard covering said opening at the inner side of the shutter and having an open lower end, an upwardly-flared shield within the guard to throw entering water against the inner wall of the latter, a shutter-locking device, and a bucket or receptacle disposed beneath the open end of the guard and opera-

tively connected with the shutter-locking device whereby the depression of the bucket disengages the locking device, substantially as specified.

5     2. The combination with a shutter having an opening, and a locking device, of a downwardly-contracted guard communicating with the said opening and open at its lower end, a bucket or receptacle operatively connected  
10 with the locking device and disposed beneath the open lower end of the guard, and a downwardly and inwardly inclined deflector 7 arranged below the opening in the shutter and within the guard to prevent water from flow-  
15 ing between the outer side of the receptacle and the shutter, substantially as specified.

3. The combination with a shutter and a

locking device consisting of a sliding bolt, of a shutter-opening attachment comprising a bell-crank lever having one arm connected to 20 said bolt, a bucket or receptacle suspended from the other arm of the bell-crank lever, and means for deflecting a stream of water discharged against the exterior surface of the shutter into said bucket, substantially as 25 specified.

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

WILLIAM B. EICHHOLTZ.

Witnesses:

G. G. KNEUBERGER,

JOS. C. WHITMORE.