

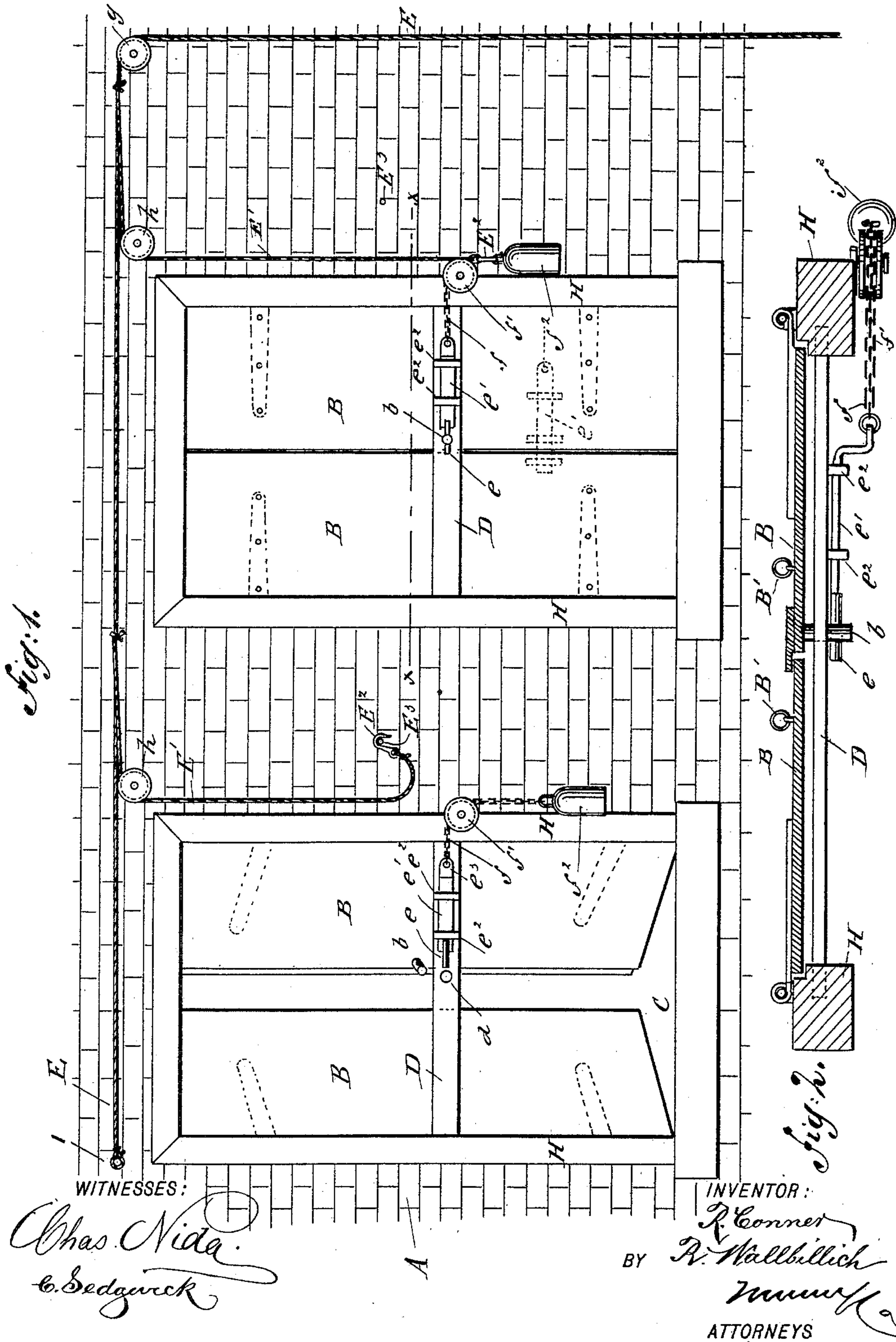
(No Model.)

R. CONNER & R. WALLBILICH.

SHUTTER FASTENER.

No. 435,799.

Patented Sept. 2, 1890.



UNITED STATES PATENT OFFICE.

RICHEARD CONNER AND ROBERT WALLBILICH, OF NEW ORLEANS,
LOUISIANA.

SHUTTER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 435,799, dated September 2, 1890.

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To all whom it may concern:

Be it known that we, RICHEARD CONNER and ROBERT WALLBILICH, of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and Improved Shutter-Fastener, of which the following is a full, clear, and exact description.

Our invention relates to improvements in shutter-fastening devices; and the object of our invention is to provide means whereby the various shutters on a building may be simultaneously locked or unlocked.

To this end our invention consists in certain features of construction and combinations of parts, which will be hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a broken inside elevation of a building provided with the usual shutters and with the locking mechanism embodying our invention, the shutters of one window being partially open and the shutters of the other window being locked; and Fig. 2 is a horizontal section on the line xx of Fig. 1.

The building A is provided with shutters B, which are of the usual construction and are hinged to the frames H of the windows C. The windows are provided with cross-bars D, of the usual construction, having a central perforation d therein, and the shutters interlock in the usual manner, and one of them is provided with an inwardly-extending staple b , which projects through the perforation d of the cross-bar when the shutters are closed. The shutters are provided on the outside with suitable rings B' , by which they may be opened, if desired. A pin e projects through the staple b when the shutters are closed, and thus prevents the withdrawal of the staple and holds the shutters in a locked position. The pin e is fixed to the end of a bolt e' , which is held upon the inside of the cross-bar D in a horizontal position by the keepers e^2 and is longitudinally movable in said keepers. The bolt e' is curved inwardly at one end and is attached to a chain f , which extends over a pulley f' adjacent to the window-frame H,

and which has at its lower end a weight f^2 . It will thus be seen that the weight f^2 will hold the pin e from engagement with the staple b , thus permitting the shutters to be freely opened. A rope E is fixed at one end at the point l to the building above the windows C and extends horizontally above a row of windows over a pulley g and thence to the lower floor of the building. Branch ropes E' are attached to the main rope E adjacent to each window C, said branch ropes extending over pulleys h near the upper ends of the windows, so as to fall beside the window-frame. The branch ropes E' are provided at their lower ends with hooks E^2 , adapted to engage the staple of the weight f^2 , and thus suspend the weight and prevent it from operating the sliding bolt e' and unlocking the shutters. A pin E^3 is fixed in the wall of the building adjacent to each window, upon which the hook E^2 is hung when not in engagement with the weight f^2 .

The device operates as follows: The parts being in the positions shown at the left of Fig. 1, the hooks E^2 of the branch ropes are hooked to the weights f^2 , and the main rope E is then tightened, so as to raise the weights and have them suspended by the branch ropes E' . When the shutters are closed, they are locked by the bolt e' and pin e , as shown at the right in Fig. 1. The hooks E^2 of the branch ropes E' , being connected with the weights f^2 , prevent the weights from opening or unlocking the shutters. To unlock the shutters, the main rope E is slackened, thus permitting the weights f^2 to drop and operate the shutter-bolts, as described. It will be seen that either shutter may be opened by unhooking the branch rope from the shutter-weight. From the foregoing description it will be seen that the shutters may be simultaneously locked or unlocked in case of fire or whenever desired, and that if a fire should break out near the main rope and should burn the rope off the weights to the various windows would drop and simultaneously unlock all the window-shutters, thereby affording easy access to or from the building. It will be readily seen that the main ropes E may be extended horizontally above the win-

dows on each floor of the building and attached to the shutter-weights on the various floors in the manner described, so that the shutters on the entire side of the building may be simultaneously operated. It will be seen, too, that on that class of shutters that are not provided with cross-bars the sliding bolts e' may be attached directly to the shutters and operated by the weights, as described, the bolts moving in keepers on the shutters, as indicated by dotted lines in Fig. 1.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. A shutter-fastener consisting in a horizontal bolt to lock the shutters, a pulley f' beyond the rear end of the bolt, a chain passing from the said rear end of the bolt over said pulley and provided with a weight to hold the bolt retracted, a pulley h above the pulley f' , and a cord or chain passed over said pulley and connected at its lower end to the said weight or its chain to support the weight and relieve the bolt thereof and permit said bolt to remain in its locked position, whereby upon slackening said cord or chain

the weight will retract the bolt and unlock the shutters, substantially as set forth.

2. A shutter-fastener consisting in the horizontal locking-bolts, pulleys $f' f'$ beyond the rear ends thereof, chains $f f$, extending from said rear ends over the pulleys, and weights f^2 on the lower ends of the said chains to withdraw or retract said bolts, upper pulleys $h h$, cords or chains E' , passed over said pulleys and having hooks on their lower ends to engage said weights or their chains and hold the weights elevated to prevent them from retracting the bolts, the pulley g , and the main rope E , passed over said pulley above the windows and secured at I to the building, the cords or chains $E' E'$ being secured to the rope E at their upper ends, whereby by slackening the rope E the weights will be allowed to fall and retract the bolts, substantially as set forth.

RICHEARD CONNER.
ROBERT WALLBILICH.

Witnesses:

F. L. FONTENOT,
ANATOLE BUENGUE.