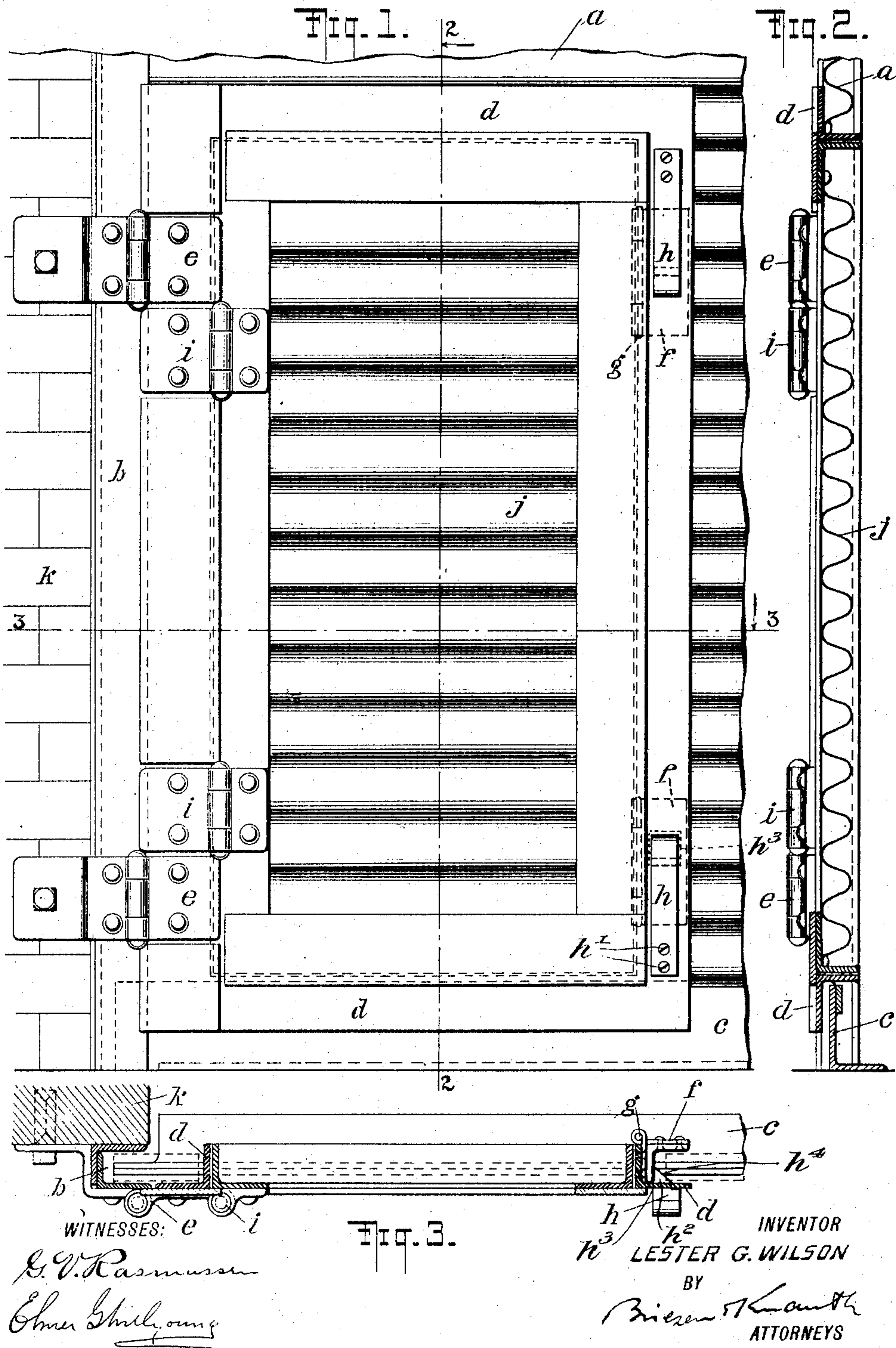


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WICKET DOOR FOR ROLLING SHUTTERS.
APPLICATION FILED JUNE 22, 1908.

929,741.

Patented Aug. 3, 1909.



UNITED STATES PATENT OFFICE.

LESTER G. WILSON, OF LARCHMONT, NEW YORK.

WICKET-DOOR FOR ROLLING SHUTTERS.

No. 929,741.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed June 22, 1908. Serial No. 439,661.

To all whom it may concern:

Be it known that I, LESTER G. WILSON, a citizen of the United States, residing at Larchmont, county of Westchester, State of New York, have invented certain new and useful Improvements in Wicket-Doors for Rolling Shutters, of which the following is a full, clear, and exact description.

My invention refers particularly to that class of shutters made of flexible or corrugated metal, or of mutually inter-locking metallic slats, especially when used to protect large door-ways or windows, and has for its object to provide a means by which, without operating the always comparatively massive shutter proper, free passage through it may be maintained, for individuals, when the shutter is closed. This object I secure by a novel construction and combination of parts which permits a regularly hinged door to become a part of the shutter when the latter is closed which door may be equipped with a knob, latch, lock or any other usual fixture. When the shutter proper is to be opened this auxiliary door may be swung completely back and out of the shutter opening leaving the latter free for passage over its entire area and without obstruction of any kind.

Referring to the drawings Figure 1 is an elevation of the lower left hand corner of a rolling shutter of the class referred to, the shutter being represented as down or closed and supposed to rise, in opening, and roll upon a suitable shaft or roller placed above in a manner well understood in the art. This view shows my improved wicket door in operative position, the remainder of the shutter being broken away to save space. Fig. 2 is a section, looking from the right, taken on the line 2—2 of Fig. 1. Fig. 3 is a section, looking from above, taken on the line 3—3 of Fig. 1.

The shutter, *a*, shown as of corrugated material, moves up and down in runways, *b*; a bottom bar, *c*, bounding the lower edge of the shutter, affords a finish to this edge and fits the shutter closely to the floor.

From the body of the shutter just above the bottom bar, *c*, and to the right of the left-hand runway, *b*, is cut a rectangular piece of dimensions just great enough to permit the insertion of a door frame, *d*; this frame may be of angle iron and attached to the side of the shutter opening and runway by hinges, *e*, *e*. When in use, as in the

figures, this frame is held in place in the curtain by two short clamp bars, *f*, *f*, hinged to the outside of the door frame at top and bottom by pivot pins, *g*. These clamp bars when thrown outward sufficiently (counter clock-wise referring to Fig. 3) clear the curtain and allow the frame, *d*, to swing freely in and out of its opening in the curtain. With the frame in place and these bars thrown inward (clock-wise referring to Fig. 3) they will hold the frame firmly against the curtain and are themselves prevented from turning back and releasing the frame by the spring click, *h*, attached to the inside of the shutter. These clicks, as I have called them, are of spring metal, such as steel, brass, phosphor-bronze, *e. g.*, cut in rectangular leaf form and attached at one end by screws *h*¹ to the frame *d*. At the free end of each click is a lug or detent *h*² fixed to the spring and normally pressed inward by the resiliency of the click and through the frame *d*, a suitable slot *h*³ having been cut in the frame for this purpose. One side of each lug *h*² is beveled as at *h*⁴ so that as the clamp bar *f* swings around to the position shown in Fig. 3 the lug will be forced out against the resiliency of the spring to fall back when the clamp bar has passed thereby holding the clamp bar in locked position and preventing the frame from being swung away from the curtain. Many mechanical equivalents of this click will readily suggest themselves and I do not confine myself, therefore, to the exact form described. Working in this door frame and attached to it by hinges *i*, *i*, is a door *j*; this may be of the same material as the shutter and, indeed, may be from the very piece which has been cut from it to make room for the door; or it may be of any other material of similar or different form. It ought, of course, to be fire-proof when the shutter is fire-proof and if of the same material and form of material as the shutter itself will present a better appearance as in such case the lines produced by corrugated or slat construction will extend from one side of the shutter to the other with no interruption other than that due to the frame and mounting of the door. As previously stated this door may be equipped with any preferred style of lock, latch or other fixture; when its frame is in place in the shutter it may be used exactly as any ordinary door in any usual location.

When the shutter is to be raised the door frame, *d*, carrying the door, *j*, closed upon it,

is released from the shutter by drawing back the spring clicks, *h*, and throwing the clamp bars, *f*, outwardly after which it is swung back upon its hinges through 180° until it rests against the wall, *k*, to which it may be held by any suitable fastening. The shutter may now be raised to any desired extent by use of any of the various mechanisms known to the art.

10 My invention is simple, not easily deranged, presents a good appearance, is economical in construction, and effective. While intended specially for use with a rolling shutter it is not necessarily restricted thereto but may be as readily adapted to a sliding or swinging shutter. When used with a rolling shutter the latter may roll from above, as in the construction described, or from below; or the curtain might roll from the one side or the other. Also while in practice shutters large enough to make a subsidiary door desirable are generally of metal and fire proof, other materials, some of them not fire proof, may, in certain cases, be used to advantage; with all of these constructions my invention may be usefully employed.

Having thus described my invention and indicated its scope, I claim:

1. In a shutter, a door frame movably attached to points independent of said shutter, said frame being adapted to cooperate with

an opening in said shutter; a door movably attached to and arranged to cooperate with said frame; and means for clamping said frame to said shutter after the latter has been closed. 35

2. In a shutter, a door frame movably attached to points independent of said shutter said frame being adapted to cooperate with an opening in said shutter; bars pivoted upon and adapted to clamp said frame to the edges of said shutter opening; and means for retaining said bars in their clamping position. 40

3. In a rolling metallic shutter, the door frame *d* hinged to points independent of said shutter, said frame being adapted to cooperate with an opening in said shutter; the door *j* hinged to said frame; the clamp bars *f* pivoted upon said frame and adapted to anchor it to said shutter; and the spring clicks, *h*, attached to said frame and adapted to retain said clamp bars in their clamping position, substantially as and for the purpose described. 50

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses. 55

LESTER G. WILSON.

Witnesses:

ELMER SHIRLYOUNG,
JOHN A. KEHLENBECK.