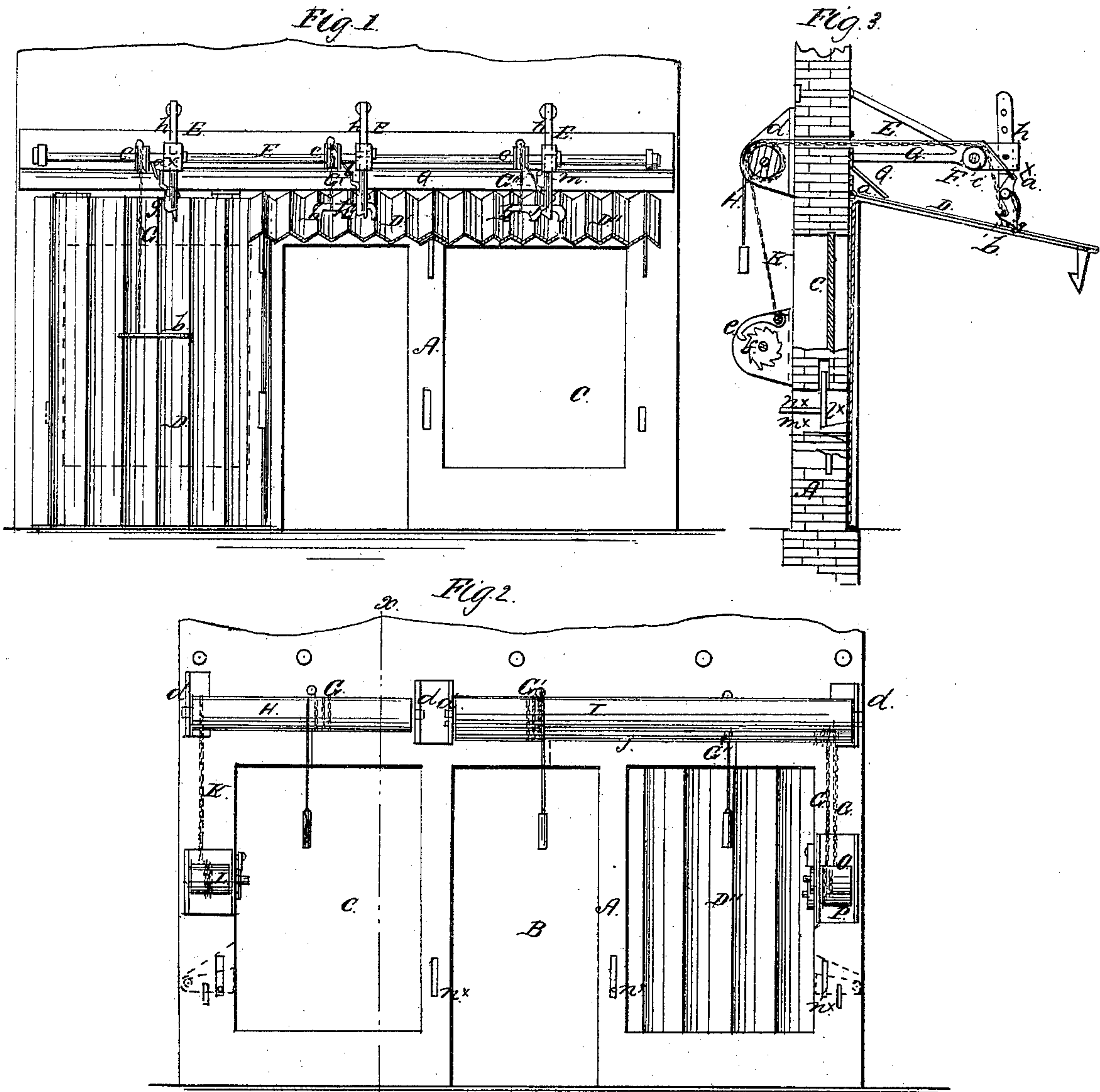


*R. D. King.*

*Shutter and Awning.*

*N<sup>o</sup> 90,177.*

*Patented May 18, 1869.*



Witnesses.  
Ernst Albrecht  
G. M. Ackerman

Inventor  
H. B. Bight  
Attorney for  
R. D. King



# United States Patent Office.

R. D. KING, OF BROOKLYN, NEW YORK.

Letters Patent No. 90,177, dated May 18, 1869.

## IMPROVED SHUTTER AND AWNING COMBINED.

The Schedule referred to in these Letters Patent and making part of the same.

### To all whom it may concern:

Be it known that I, R. D. KING, of Brooklyn, in the county of Kings, and State of New York, have invented a new and useful Combination of an Awning and Shutters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention relates to a new and useful combination of an awning and shutters, designed to be applied to the fronts of buildings.

The invention consists in hanging or suspending shutters at their top edges, and having them applied to a building, and arranged in such a manner, and in connection with windlasses and catches or fastenings, that the shutters are rendered capable of serving two different purposes, to wit, that of an awning and of shutters, and at the same time be capable of ready adjustment to serve in either capacity, a slight manipulation only being required to effect that result.

In the accompanying sheet of drawings—

Figure 1 is a front view of my invention.

Figure 2, a rear view of the same.

Figure 3, a transverse vertical section, taken in the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

To enable others skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the lower part of the front of a building;

B is a door; and

C, the windows of the ground floor thereof.

D D' D" represent three shutters, which may be of either metal or wood, but I prefer to have them of sheet or rolled-metal plate, corrugated, so as to admit of lightness with a requisite degree of stiffness.

These shutters are attached, at their upper edges, to the front of the building, just over the door and windows, by hinges or joints *a*, and said shutters are of such a length, that when down, they will reach to the bottom of the front, A, or extend down a suitable distance below the door and windows.

To the front of the building, just above the windows and doors, there is fitted, in suitable brackets, E, a horizontal rail or rod, F, which extends nearly or quite the whole width of the building, the brackets being constructed so as to hold the rail or rod F firmly in position, and sustain the weight of the shutters when the same are raised.

To the outer side of each shutter, at or near the centre, there is attached a staple or loop, *b*, to which one end of chains G is connected.

These chains pass over loose pulleys *c* on the rail or rod F, and thence through the front of the building,

and are connected, respectively, to shafts H I J, which are fitted in suitable bearings *d*. (See figs. 2 and 3.)

The shaft H has a chain, K, attached to it, which extends down, and is connected to a windlass, L, provided with a pawl and ratchet, *e f*.

The chain K is wound upon the shaft H in a reverse direction to the chain G, which is connected thereto, and when the shutter D is down, or in a closed position, the chain G will be wound from shaft H, and the chain K wound up thereon.

By turning the windlass L in the proper direction, the shaft H will be turned, so as to wind the chain K upon the windlass-drum, and off from shaft H, while the chain G of said shaft will be wound upon it, and the shutter D raised.

When this shutter is raised to the proper or desired position, a pivoted catch or fastening, *g*, which is attached to an upright or wind-brace *h*, in a bracket, E, engages with the staple or loop *b* of the shutter D, and holds or sustains it in proper position. (See fig. 3.)

This catch or fastening has a fine cord, wire, or chain, *a*<sup>x</sup>, attached to it, which passes through the front of the building, and admits of a person within the same releasing the shutter when it is to be let down or closed.

In order to let down or close the shutter, the pawl *e* is raised free from the ratchet *f*, and the windlass-drum allowed to turn gently, so that the chain K may gradually unwind from it under the weight of the shutter, a person having hold of the crank of the windlass, to control the descent of the shutter.

In practice, I design to have a weight and chain attached to the windlass, to serve as a counterpoise for the shutter.

The other two shutters, D' D", are arranged in precisely the same way, G' G" being the chains which are attached to the shutters D' D", shafts I J, and to windlasses O P, said parts corresponding to the chains G and K and windlass L, above described.

The pivoted catches or fastenings for the shutters D' D" are designated by *h' j*, and the cords or chains thereof are designated by *l m*.

When the shutters are elevated, they serve as an awning, and are designed to have a slightly-inclined position, from their ends outward, as shown in fig. 3, to admit of a free escape of water.

The inner ends of the shutters, where they are hinged to the building, are covered by a strip, Q, to prevent the leakage of water down between them and the building.

The wind-braces *h* serve to prevent the shutters, when raised and serving as an awning, being thrown up by the wind.

Although I do not confine myself to any particular material for the construction of the shutters, I prefer to have them of metal, so that they will serve the same purpose as those generally known as fire-proof and



burglar-proof. Iron would answer for fire-proof, and steel for burglar-proof shutters.

The shutters should, when made of metal, be corrugated and attached to a light skeleton metal frame, as lightness, combined with strength, would be thereby attained.

When the shutters are closed, to serve as shutters, they are secured in a closed state, by pivoted catches or fastenings  $l^x$ , which are fitted in the front of the building, and engage with hooks  $m^x$ , projecting from the inner sides of the shutters. (See fig. 3.)

The catches or fastenings  $l^x$  have pins  $n^x$  attached, which pass through openings in the front of the building, to admit of said catches or fastenings being operated by a person within the building.

Thus, by this simple arrangement, I obtain the combination of an awning with shutters, and in such a way that the latter may be adjusted to serve in either capacity by a very simple manipulation, and with the greatest facility.

This invention may be applied to buildings at a very

moderate expense, not materially exceeding that of a good canvas awning, and will last an indefinite period, whereas a first-class canvas awning will rarely last longer than two years.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The attaching, to the front of a building, the upper ends of one or more shutters, by hinges or joints, so that said shutters may be freely raised and lowered; in combination with windlasses, or their equivalent, one or more, arranged with chains or cords, pulleys, and suitable fastenings, whereby the shutter or shutters are made to serve the double purpose or use of an awning and shutters, substantially as herein set forth.

The above specification of my invention, signed by me, this 15th day of March, 1869.

R. D. KING.

Witnesses:

J. F. H. SMITH,  
HENRY K. SULLIVAN.