

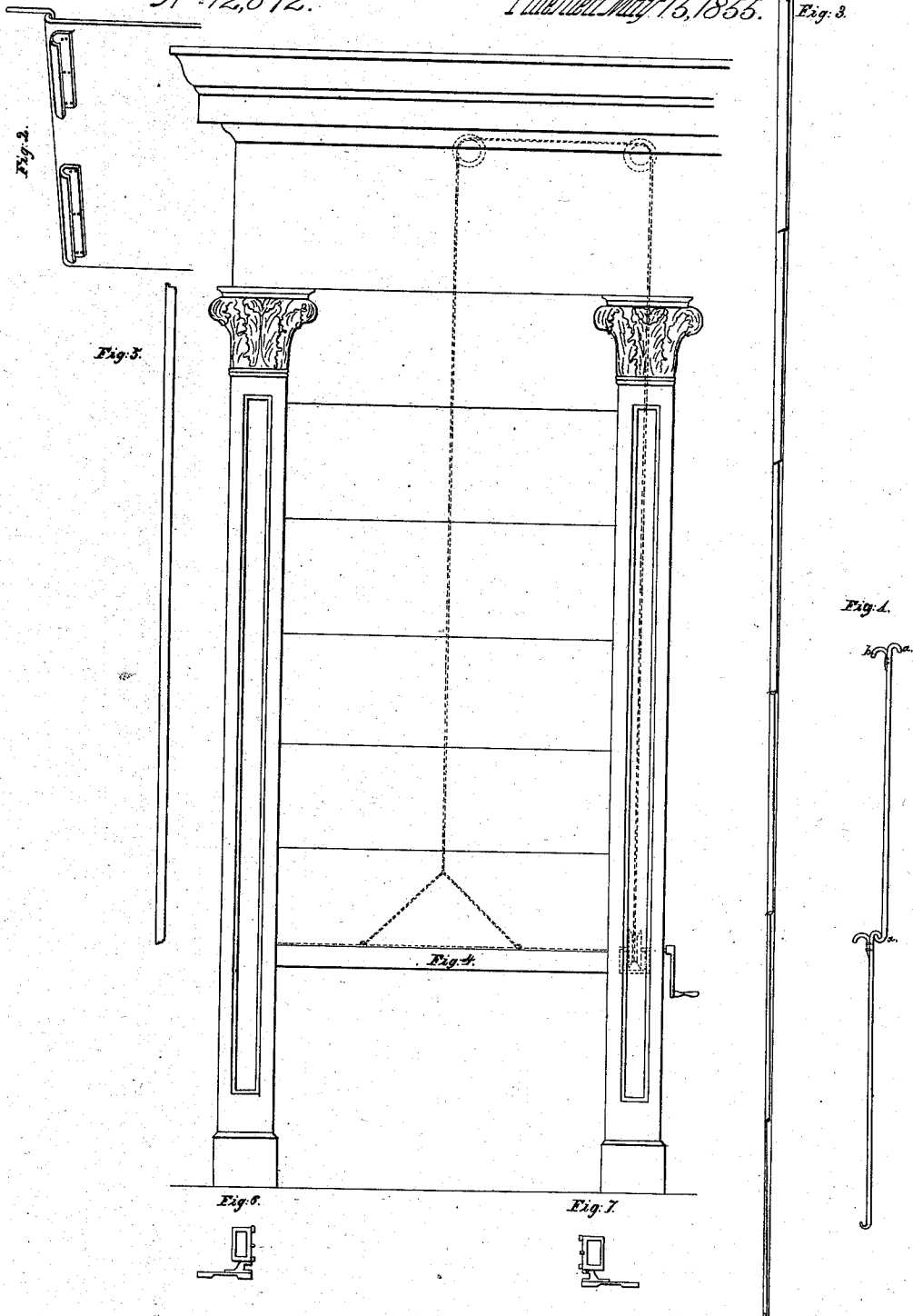
G. W. Phijns.

Window Shutter.

N^o 12,872.

Patented May 15, 1866.

Fig. 3.



UNITED STATES PATENT OFFICE.

GEORGE W. PHIPPS, OF PHILADELPHIA, PENNSYLVANIA.

WINDOW-SHUTTER.

Specification of Letters Patent No. 12,872, dated May 15, 1855.

To all whom it may concern:

Be it known that I, GEORGE W. PHIPPS, of the city and county of Philadelphia, State of Pennsylvania, have invented an
5 Improved Mode of Manufacturing Lifting or Sliding Shutters or Window-Guards; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying draw-
10 ings and to the letters of reference marked thereon.

The nature of my invention consists in the forming of the side grooves of a lifting or sliding shutter, made of independent
15 slats, without bearing slots, to sustain the slats when down, and forming a perfect shutter; and by providing a bar or rod of metal, attached to the upper slat composing the shutter, sliding in independent grooves
20 above, and disconnected from the others; also vertical side bars to protect and secure the shutter from external pressure when closed, and to support the same when raised, and to prevent the same from being raised
25 from the outside when closed.

To enable others skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

I construct several independent slats
30 (Figure 1) of a shutter, by turning over the edges (*a, a*) of a sheet of metal of any width in opposite directions, at top and bottom, or by attaching plates to the same, for the purposes hereinafter described; the laps
35 or turns so formed, stiffening the slat and catching into the slats or sheets above and below, to secure them together when down and thereby preventing them from being forced in, and to make a perfect shutter.
40 On the inside of the slats as near the upper edge as possible, I attach a ledge or catch (*b* Fig. 1 and Fig. 2) for the purpose of catching and holding the upper edge of the slat below it when being lifted in raising
45 the shutter above the window in the side grooves of the window frame, of a peculiar form, as shown in the drawings, the shutter is raised by lifting the lower slat first, and in its rising catching and taking up each
50 slat one after the other, by a rope or chain attached to the lower edge of the inside of the lower slat, which rope or chain passes up to a pulley or pulleys over across the

top of the window, down one or both sides of the same, to a drum or other similar
55 contrivance.

On the upper edge of the top slat I rivet a bar or rod of metal to support the same and which is made to run in a separate groove over the other—when the shutter is down
60 this rod or bar rests in its groove upon the top of the frame or column of the window to sustain the weight of the shutter when down. On the bottom of the lower slat of the shutter I put another bar (*a* Fig. 4) to
65 rest on the sill of the window when down to keep the shutter in its place, and enable it to be secured by the vertical side bar Fig. 5. I also place in each of the sides of the frame a vertical bar (Fig. 5) which
70 turns on its ends for the purpose of pressing the shutter forward, when closed, against the front part of the groove, and hold it firmly in its place; this bar has an indenture on its lower edge to secure the
75 bar on the lower slat, to hold down the shutter and prevent its being lifted from the outside, also to close and fold into the grooves when the shutter is raised, and also to support the weight of the shutter, to pre-
80 vent any accident from falling, and to take the strain off the lifting chain.

I do not claim a lifting or sliding shutter made of slats or sheets; neither do I claim the peculiar shape of slats, as they have
85 been before made in different shapes and forms—nor do I claim any particular mode of raising the same. But

What I do claim and desire to secure by Letters Patent, is—
90

The peculiar form of the side grooves in the frame, tapering from the bottom to the top, increasing with the additional thickness given by the shutters in being lifted. I also claim the supporting top bar and its
95 grooves, and the vertical side bars as described and for the purposes described. I also claim the combination or arrangement of the upper bar, the vertical bars and the slats to produce the effect alleged, or any
100 other substantially the same.

Philada., Febr'y. 15th, 1855.

GEO. W. PHIPPS.

Witnesses:

R. F. BANCROFT,
EDWIN F. DURANG.