

C. T. STECKEL.
FOLDING GRATINGS FOR WINDOWS.

No. 193,195.

Patented July 17, 1877.

Fig. 2.

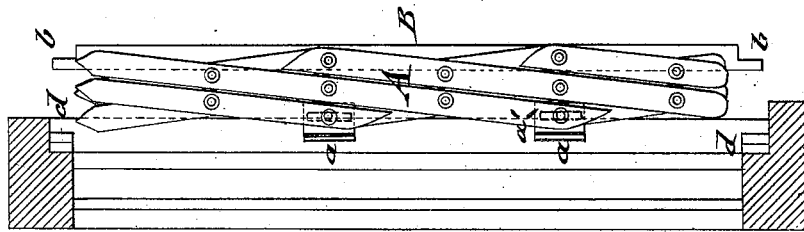
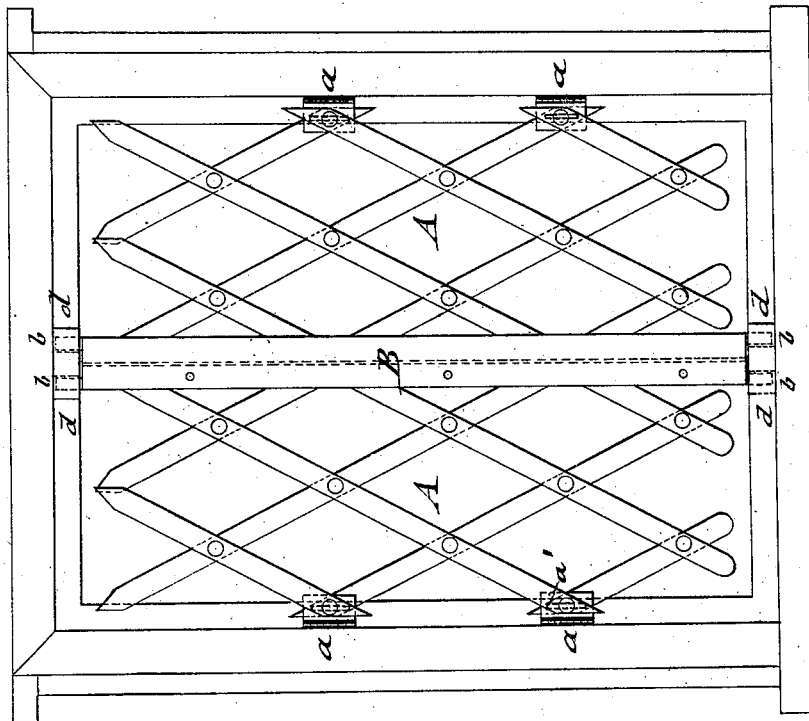


Fig. 1.



WITNESSES:

H. Rydquist
J. H. Scarborough.

INVENTOR:

C. T. Steckel.
BY *mm*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CALVIN T. STECKEL, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN FOLDING GRATINGS FOR WINDOWS.

Specification forming part of Letters Patent No. 193,195, dated July 17, 1877; application filed April 30, 1877.

To all whom it may concern:

Be it known that I, CALVIN T. STECKEL, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Folding Shutter, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation of my improved folding shutter, shown in closed position; and Fig. 2 is a vertical transverse section of the window-casing, showing the shutter thrown open and its slats in folded position.

Similar letters of reference indicate corresponding parts.

This invention is intended as a substitute for the fixed iron gratings or bars in basement, store, and other windows, so as to provide a shutter that may be folded and turned, making the room more cheerful, and facilitating the cleaning of the windows, &c., while combining, when locked, the same degree of safety as the bars.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

The shutter-sections are retained by end bars and top and bottom guide-stops of the window-casing, and then locked in this position.

In the drawing, A represents my improved folding shutter, which is made of one or two sections, according to the width of the window to which the same is to be applied. The shutter is made of cross-bars, pivoted together in the nature of lazy-tongs, so as to be readily folded into small space, or opened to extend

across the window and close the same. The pivot-bars of the shutter are applied at the end adjoining the window-casing to hinges *a* of the same, the pivot-bars swinging on a fixed pivot-pin of one hinge, while the pivot of the other hinge slides at the same time in a guide-slot, *a'*, of the same, so as to admit the folding or turning to the outside or inside, according as the shutter is arranged at the outside or inside of the window. The other end of the shutter is provided with an upright bar, B, to which the cross-bars are pivoted, and which slides, by end projections *b*, into recessed top and bottom guide plates or stops *d* of the casing, so as to hold the shutter in closed position, as shown in Fig. 1, and admit the locking of the upright bar or bars by a padlock, or any other suitable locking device.

The folding shutter is burglar-proof, furnishing the same protection as the fixed grating, but giving, in addition thereto, the great convenience of opening them during the day, and presenting a neater appearance without the objectionable features of the rigid bars.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of a folding lazy-tong shutter with a fixed and slotted hinge of the window-casing, to fold and turn the shutter, substantially as and for the purpose specified.

CALVIN T. STECKEL.

Witnesses:

PAUL GOEPPEL,
C. SEDGWICK.