

W. E. Brock,

Blind.

No. 100,593.

Patented Mar. 8. 1870.

Fig. 1.

Fig. 2.

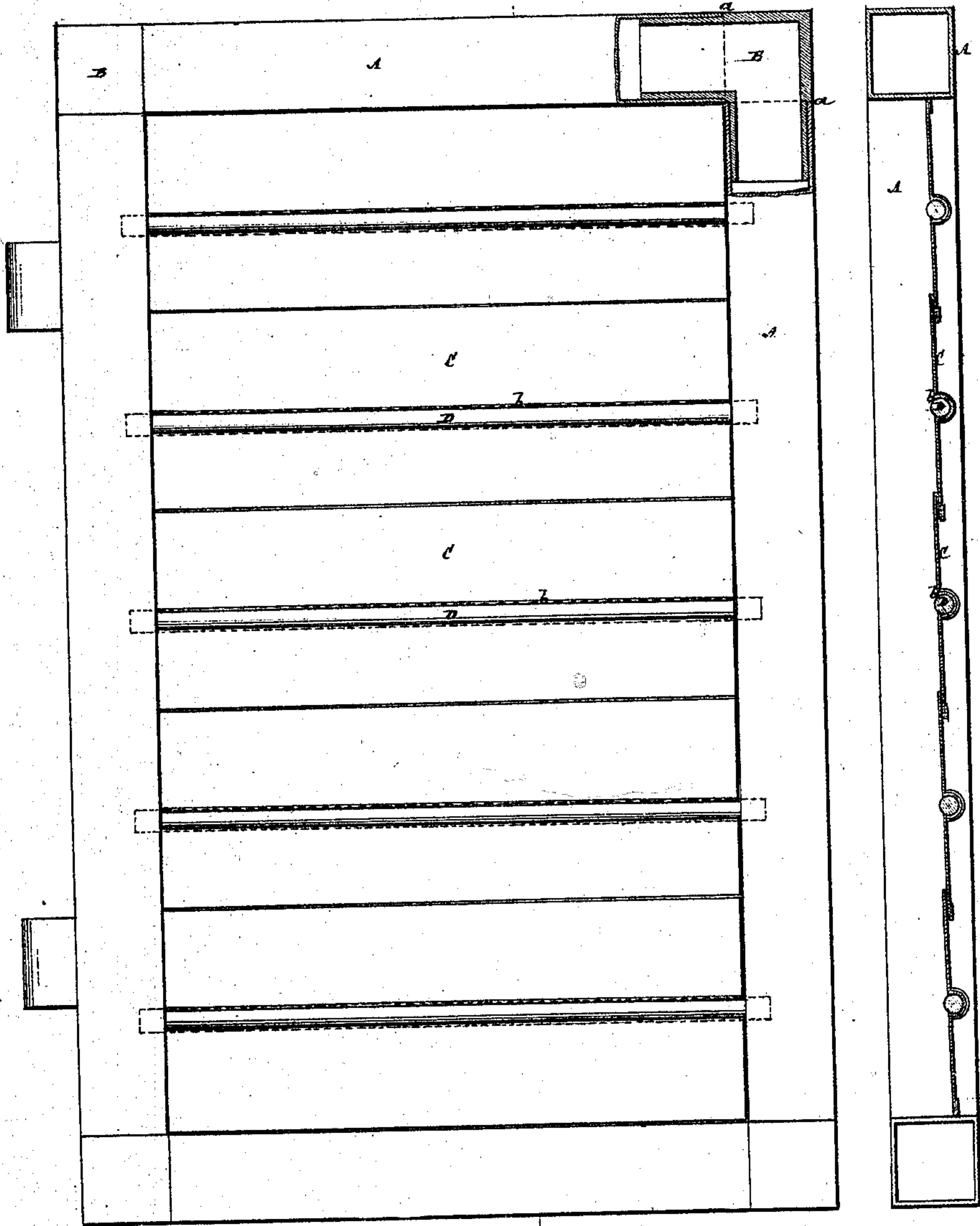
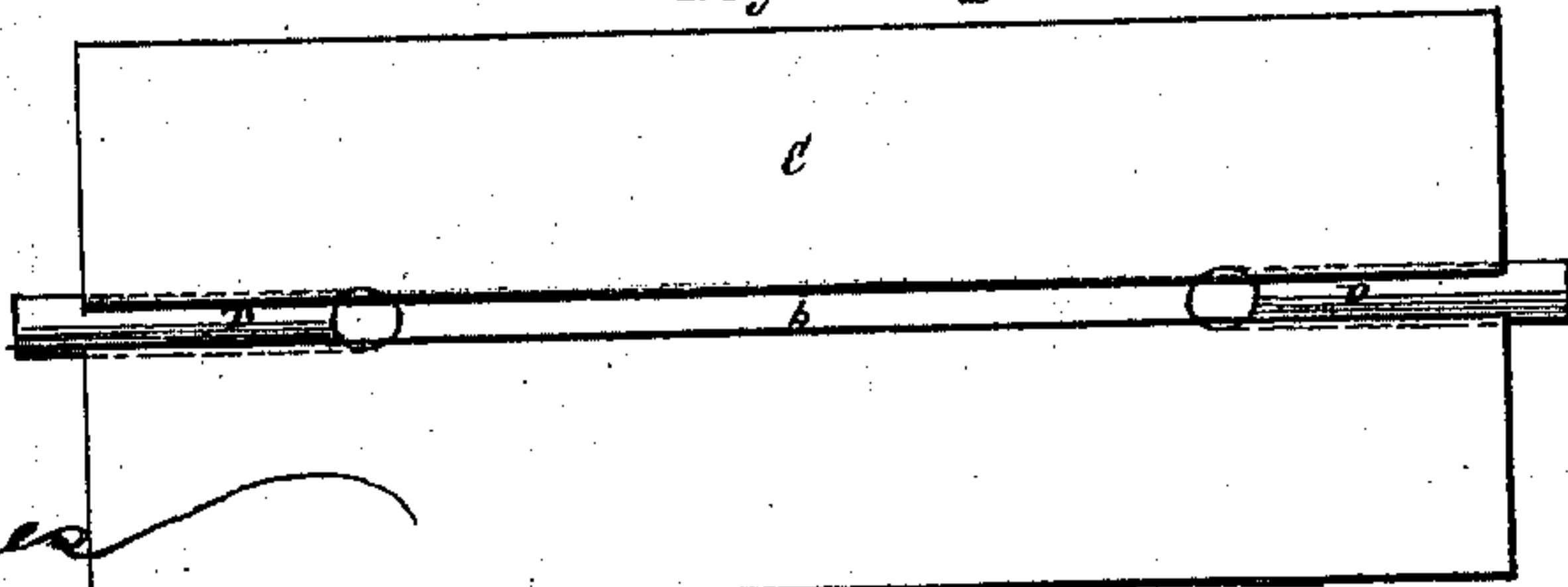


Fig. 3.



Witnesses:

Fred. Haynes  
Fred. Enoch

W. E. Brock



# UNITED STATES PATENT OFFICE.

WILLIAM E. BROCK, OF NEW YORK, N. Y.

## IMPROVEMENT IN BLINDS.

Specification forming part of Letters Patent No. 100,593, dated March 8, 1870.

*To all whom it may concern:*

Be it known that I, WILLIAM E. BROCK, of the city, county, and State of New York, have invented a new and useful Improvement in Blinds, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents an inside face view of a blind constructed in accordance with my improvement, showing one of its corners broken away or in section; Fig. 2, a longitudinal transverse section of the same, taken as indicated by the line *xx* in Fig. 1; and Fig. 3, an inside view of one of the blind-slats and tenon there-to under one form or modification.

Similar letters of reference indicate corresponding parts.

My improvement relates to outside blinds for windows, made wholly or for the most part of metal, and is more particularly designed to be applied to blinds which are hinged on their one side to the window-frame, and are made up of swinging slats, capable of being adjusted in concert to give an open or close character to the blind.

My invention consists in a novel mode of hanging the metal slats on their tenons, or securing the tenons to the slats, by forming the latter with longitudinal grooves or bends of a peculiar locking or holding character to the tenons that are entered at the end or ends of the slats within said groove. Also, the invention includes a peculiar hollow metallic frame to the blind, substantially as hereinafter described. A blind constructed according to said invention is at once light, cheap, and fire-proof.

Referring to the accompanying drawing, the frame of the blind is here shown as constructed of hollow sheet-iron tubes A A, of rectangular form in their transverse section, and united by metal elbows B B, which may be made of malleable iron, and are of rectangular shape, to accord with the square or oblong

form of the frame; also are reduced at their ends, so as to fit within the tubes A A that bear at their extremities against shoulders *a a*, formed by the reduction of the elbows at their ends. Thus fitted together, the joints established by the tubes and their hollow elbows may be soldered to make close and secure the same.

The tubes A A being a regular marketable commodity, it is only necessary to have the hollow elbows B B cast or formed to suit. In this way may a blind-frame be made light, cheap, and durable, besides having the advantage of being fire-proof.

The swinging slats C C are made out of sheet metal, with their tenons D secured to them by forming the slats on their inside faces, with longitudinal grooves *b*, of curvilinear form in their transverse section, and of greater sweep than a semicircle, so that, on entering the tenons D within and through the ends of the grooves *b*, the metal of the slats, by its rigidity, serves to retain and secure the tenons in their place, preferably, however, soldering the tenons and slats together to cement their junction.

The tenons to each slat may either be made by running a whole rod through the entire length of the slat, as represented in Fig. 1, or by entering within the slat from the opposite ends of the groove therein two short rods or bars, as shown in Fig. 3.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The metal slats C, formed with longitudinal grooves *b*, as described, and having the tenons D fitted therein, substantially as specified.

2. The blind-frame, made up of rectangular metal tubes A A and elbows B B, substantially as shown and described.

W. E. BROCK.

Witnesses:

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