

No. 24048.

CHARLES NEER

Improvements in Metallic Blinds

Patented May 17 1859.

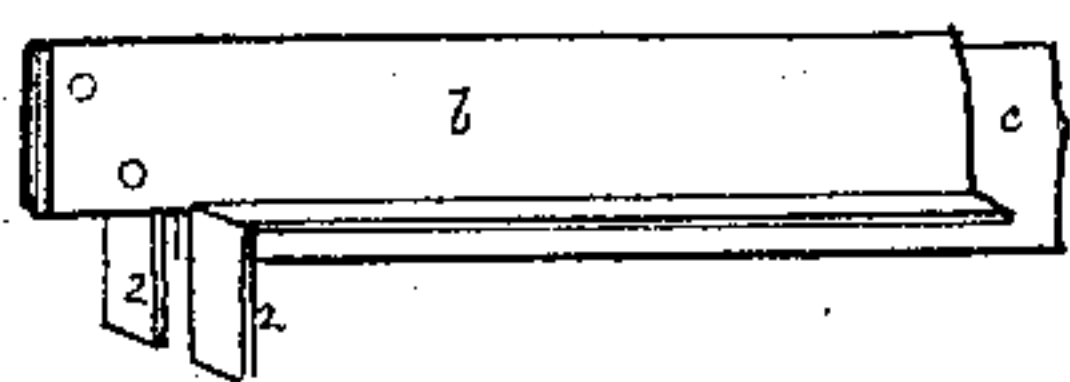
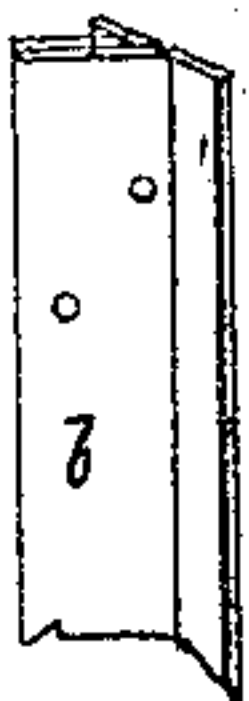
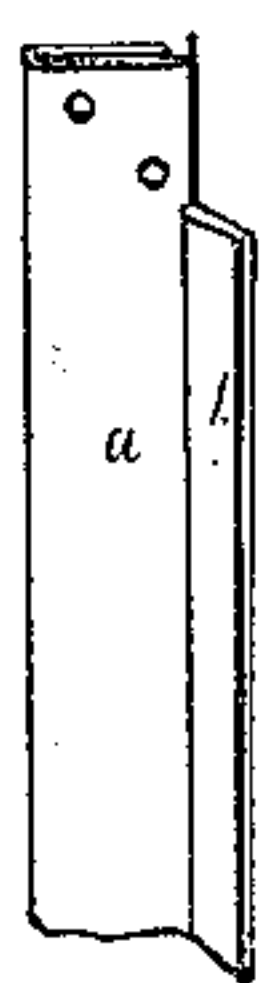


Fig. 1.

Fig. 3.

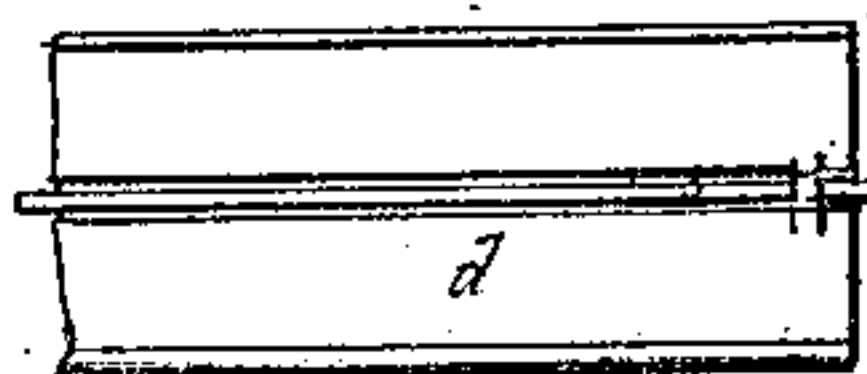


Fig. 4.

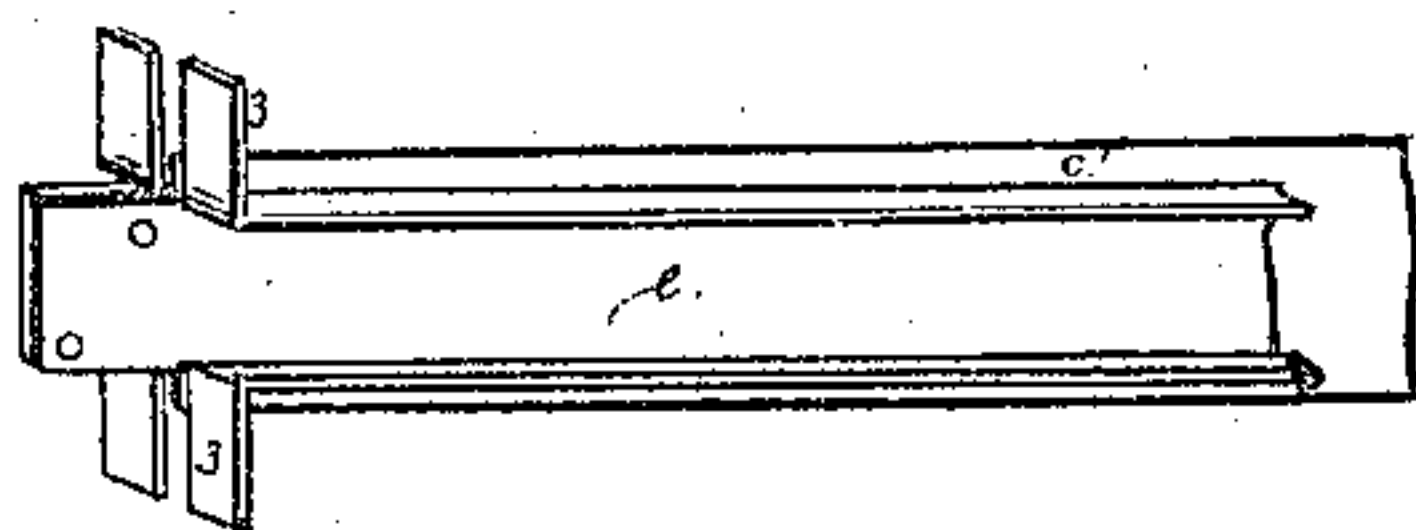
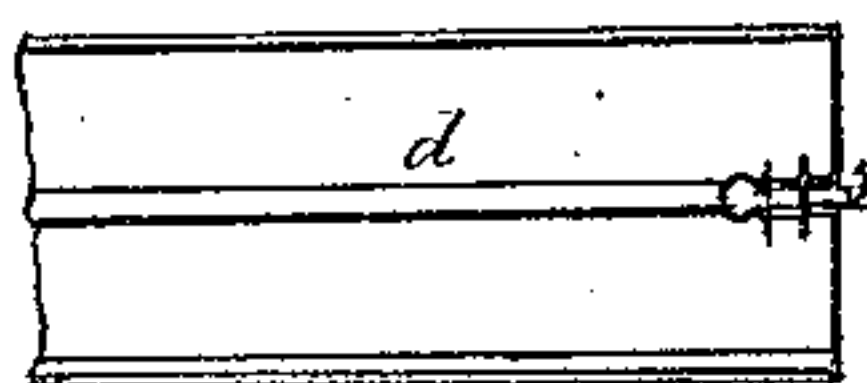
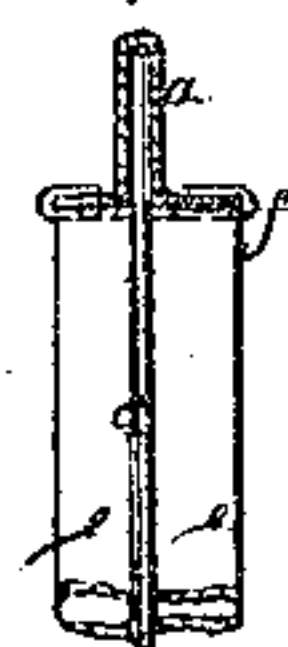


Fig. 2.



Fig. 5.



New York March 25<sup>th</sup> 1859

Charles Neer

Witness

Lemuel M. Seall

Thomas G. Harvill

# UNITED STATES PATENT OFFICE.

CHARLES NEER, OF ALBANY, NEW YORK.

## METALLIC FRAME FOR WINDOW-BLINDS.

Specification of Letters Patent No. 24,048, dated May 17, 1859.

*To all whom it may concern:*

Be it known that I, CHARLES NEER, of Albany, in the county of Albany and State of New York, have invented, made, and applied to use certain new and useful Improvements in Metallic Blinds; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1, represents perspective views of the ends of the cross rails, and portions of the vertical side bars of the frame. Fig. 2, is a vertical cross section of portions of a blind. Figs. 3 and 4, are side views of the slats, and Fig. 5, is a sectional plan of the joint between the cross rails and side bars.

Similar marks of reference denote the same parts.

The nature of my said invention relates to the formation of frames for metallic blinds out of folded sheet metal, whereby very great strength and lightness are combined and the cost is decreased, so that by such metallic frames receiving the sheet metal slats a durable, cheap, and ornamental blind is produced that can be used for either inside or outside work, and can be formed of ornamental metal such as sheet brass or Russia iron, or of more common metal and painted.

To make the vertical or side bars *a* of the blind I fold a strip of metal into a V shape see Fig. 1, and remove the flange parts 1, 1, near the ends. The cross rails at top and bottom I form of similarly shaped metal *b*, Figs. 1 and 2, and cut the flange parts away from the body so that they can be bent down as at 2, 2, Fig. 1, and come up against the flanges of the bars *a*, *a*, when the ends of the rails *b*, *b*, are slid within the ends of *a*, *a*, at which point they are riveted so as to form three sides of the frame and then the slats are to be inserted as hereafter detailed, or the parts may be all set together on a suitable bench before riveting up. Into the top and bottom rails I insert a flat strip or plate *c*, against the edge of which the slats *d*, *d*, set, and the same also serves to strengthen the frame.

The center or intermediate rail or rails (*e*, *e*,) are formed of flanged plates set back

to back against the plate *c'*, that serves a similar purpose to the plate *c*, and the flanges are slitted from the ends of these plates as at 3, 3 and turned up so as to set against the flanges of the vertical bars *a*, *a*, when the ends of *e*, *e*, and *c'*, are inserted in the vertical bars *a*, *a*. It will be now apparent, that by placing the sheet metal blind frame together in the manner shown and uniting the parts firmly to each other by rivets, screws or other means a very strong and durable frame is formed ready to receive the slats that are fitted in the following manner: *f*, *f* are strips of metal folded into a trough shape and provided with a row of holes through each, at the distance apart and of the proper size, to receive the ends of the slats *g*, *g*. These slats are inserted into said holes when the blind frame is partially or entirely set together and the edges of these trough shaped strips are turned down over the flanges 1, 1, of the vertical bars *a*, *a*, at the same time binding said flanges together and making a more rigid frame, as well as providing the holes in which the ends of the blind slats are revolved.

My slats *g g* shown in Fig. 3, are formed of corrugated strips of metal set on a cross rod 5, the ends of which enter the holes in the strips *f*, *f*, and said rods pass through loops punched up in the slat, or where it is not desired to have the cross rod the entire length of the slat, short gudgeons may be used as seen in Fig. 4, in which the ends of the wire should be spread out by a swage or punch so as to retain it firmly in place, the devices shown in Figs. 3 and 4, being identical except in the removal of the middle part of the rod 5.

It will be evident that the strips *f*, *f*, have peculiar advantages for receiving the ends of the slats, because they can be applied after the frame of the blind is set together and the holes therein are more durable than in wood, and less costly than when bored into cast metal; and hence said strips *f*, *f*, can be applied to a metallic frame of a T form of any desired construction or under other circumstances for the foregoing purposes.

Having thus described the nature of my said invention and the construction and op-

eration of the same, what I claim and desire to secure by Letters Patent is—

1. Constructing frames for blinds of sheet metal bent in a U form and connected together substantially as specified.

5 2. The bent or folded strips  $f$ ,  $f$ , provided with holes receiving the ends or tenons of the slats as set forth.

In witness whereof I have hereunto set my signature this twenty-fifth day of March 10 1859.

CHARLES NEER.

Witnesses:

LEMUEL W. SERRELL,  
THOMAS G. HAROLD.