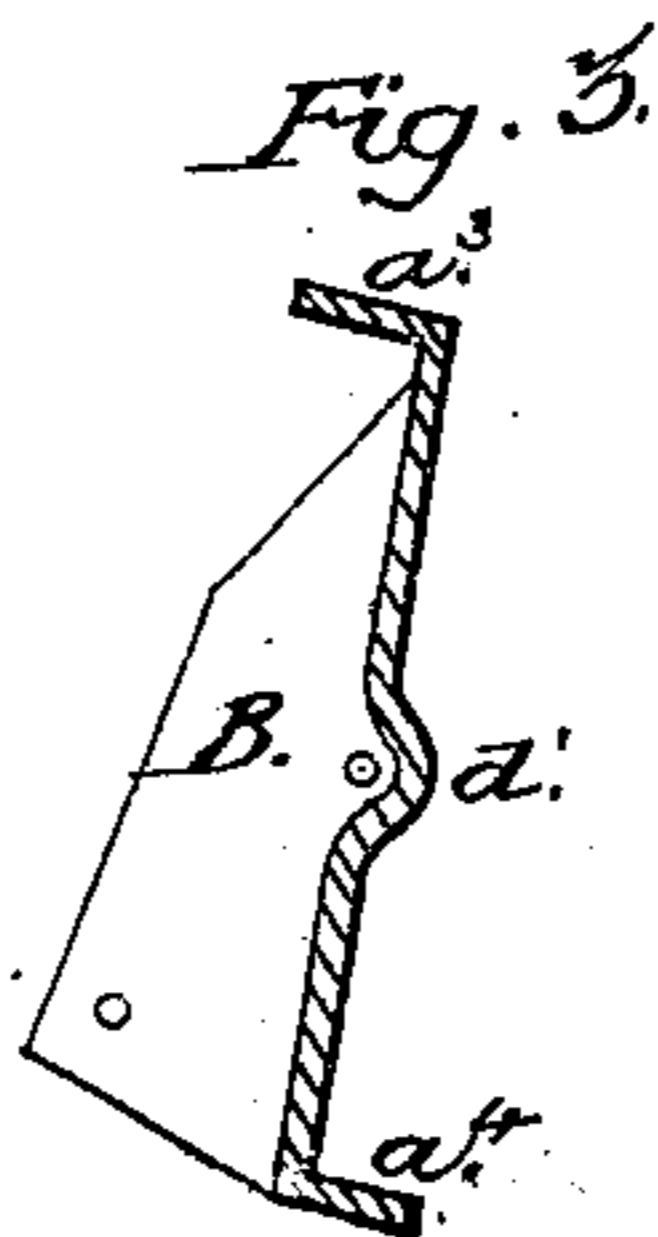
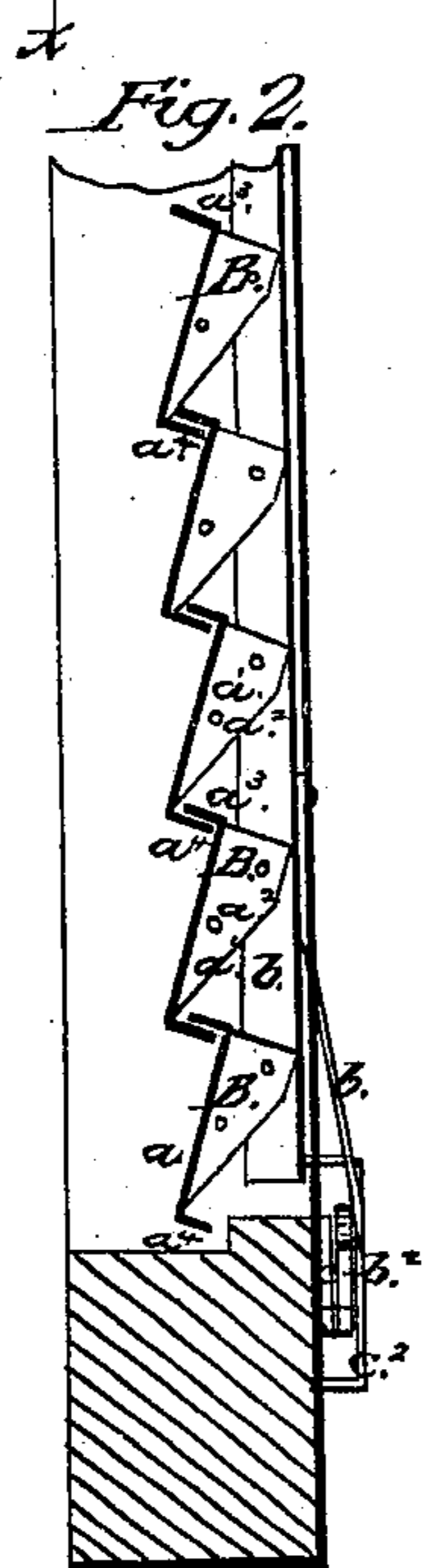
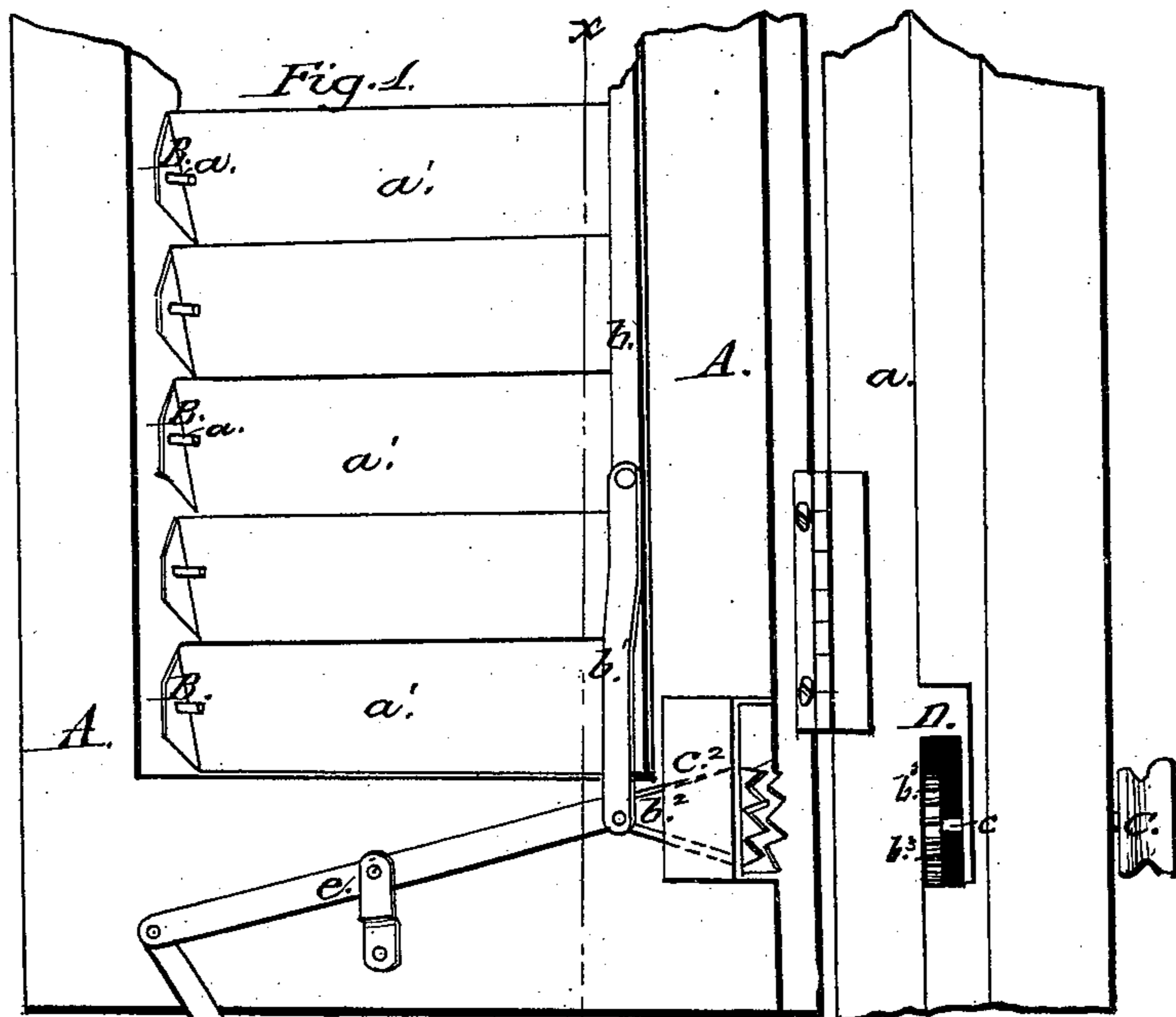


S. M. Sherman

Window Blind.

N^o 96,737.

Patented Oct. 12, 1869.



WITNESSES:
Chas. F. Brown,
L. J. Noyes

INVENTOR:
S. M. Sherman
per H. W. Beadle
Attorney.

United States Patent Office.

S. M. SHERMAN, OF FORT DODGE, IOWA.

Letters Patent No. 95,737, dated October 12, 1869.

IMPROVED WINDOW-BLIND.

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, S. M. SHERMAN, of Fort Dodge, in the county of Webster, and State of Iowa, have invented new and useful Improvements in Window-Blinds; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to certain improvements in window-blinds, whereby the slats composing the same are operated from within, and are so constructed that when closed their edges form water-tight joints, as will hereinafter more fully appear.

In the drawings—

Figure 1 is a perspective view of my invention;

Figure 2, a vertical central section through line x — x , fig. 1; and

Figure 3, a sectional view of different forms of slat.

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

A represents the frame of the upper section of a blind, which is of ordinary construction, and is hinged to the casing a .

a^1 , a^2 , &c., represent the slats, which are constructed of sheet-metal, and are pivoted to the frame A, by the pins a^2 .

The upper edges of the slats a^1 are bent outward, forming right angles a^3 , and their lower edges are bent inward, at a^4 , and, when closed, fit closely over the projecting upper edges, thereby forming water-tight joints.

The ends of the slats a^1 are provided with the flanges B, which project inward, and by which the slats are pivoted to the frame.

The flanges on the inner ends of the slats are longer than those on the outer, and are pivoted to the vertical bar b , which is connected by the connecting-rod b^1 with the rack-segment b^2 , which is operated by the pinion b^3 , within a recess in the casing a .

The pinion b^3 is rigidly attached to a shaft, c , which extends through the casing a , and is provided on the inner end with a knob, C, by means of which it is turned.

The position of the pinion b^3 may be altered, by pushing in the knob C, whereby the pinion b^3 is brought to bear upon another rack-segment, C', beside the seg-

ment b^2 , which operates the slats on the lower section of the blind, by means of the pivoted bar c and connecting-rod c^1 , which is attached to the slats in any suitable manner.

The rack-segments b^2 and C' are pivoted in a metal case, c^2 , which, when the blind is closed, fits closely within the recess D in the casing a , and brings one of the segments into connection with the pinion b^3 .

d , fig. 3, represents another form of slat, which is provided with a longitudinal concavo-convex projection, d' , for the purpose of imparting strength and stiffness to the slat.

By constructing the segments of greater length, so as to extend to the middle of the blind, the old form may be employed.

The mode of operation will be readily understood.

To operate the slats in the upper section, the knob C is pulled out to its extreme limit, which brings the pinion b^3 into connection with the rack b^2 , and by turning the same in either direction, the slats may be operated as desired.

The same effect is produced on the slats in the lower section, by pushing in the knob, which engages the pinion with the rack C'.

By this construction, I obtain several important advantages, among which are cheapness, simplicity, effectiveness, and the formation of water-tight joints between the slats, the good results of which will be obvious.

Having thus fully described my invention,

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

1. The sliding-shaft c , provided with pinion b^3 and knob C, in combination with rack-segments b^2 and C', arranged and operated substantially as described.

2. The slats a^1 , constructed of sheet-metal and provided with the angular edges a^3 and a^4 , as and for the purpose set forth.

3. The slats a^1 , with the bars b and c , and connecting-rods b^1 and c^1 , in combination with rack-segments b^2 and C', arranged and operated substantially as described.

This specification signed and witnessed, this 4th day of February, 1869.

S. M. SHERMAN.

Witnesses:

H. BEECHER,

JAMES B. WILLIAMS.