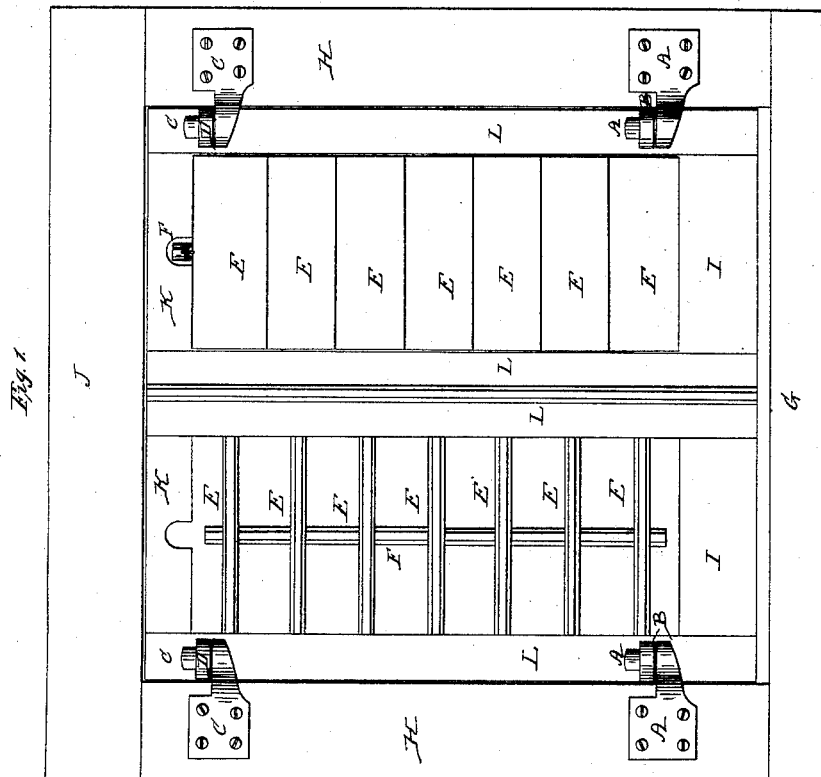
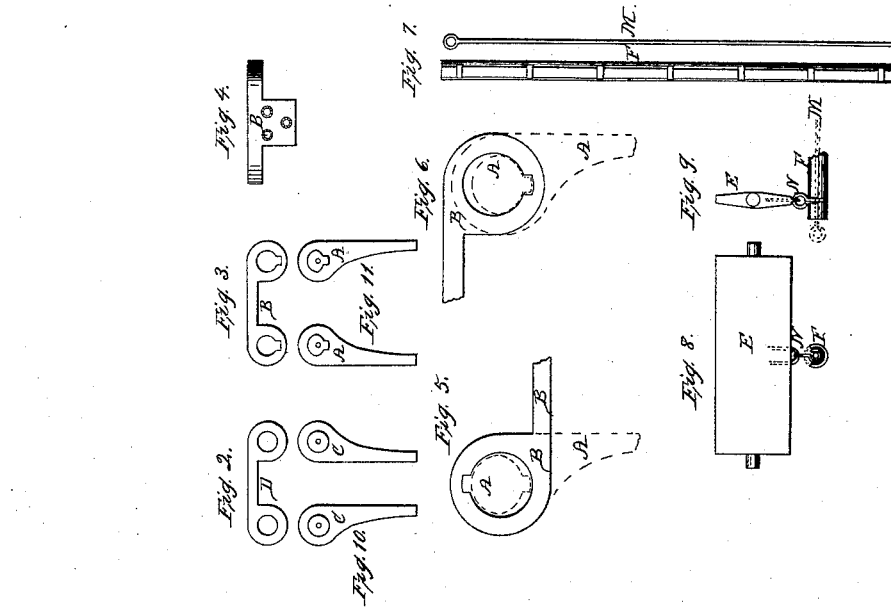


Howell, Thompson & Snyder, Hinge.

N^o 45,499.

Patented Dec. 20, 1864.



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UNITED STATES PATENT OFFICE.

BYRON C. HOWELL, ITHACA, AND A. B. THOMPSON AND E. D. SNYDER, OF
OWEGO, N. Y.

IMPROVED SHIFTING-BLIND.

Specification forming part of Letters Patent No. 43,499, dated December 20, 1864.

To all whom it may concern:

Be it known that we, BYRON C. HOWELL, of the village of Ithaca, in the county of Tompkins and State of New York, and A. B. THOMPSON and E. D. SNYDER, of Owego, county of Tioga, in same State, have invented a new and useful Improvement, entitled "The Eureka Shifting Blind;" and we 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 accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal elevation showing the blinds closed, with the rolling shutters or slats E E E E E E to the left-hand blind open. Fig. 7 represents the shutter or slat-rod F when detached from the blind, and the wire which is inserted through the eyes N on the inside of the rod F when the rod is attached to the blind. Fig. 8 represents a side elevation of one of the slats E detached from the blind, with a transverse section of the rod F attached by the eye N. Fig. 9 represents an end view of the slat E and a section of the rod F as connected by means of the eye N and the wire M. Fig. 10 represents the upper hinge, C C. Fig. 11 represents the lower hinge, A A.

Having described the different views of the drawings, we will proceed to describe the construction and operation of our blind and rod.

We construct a blind with rolling slats E E E E E E in the usual mode. We then take a strip of tin or other metal suitable for the purpose and punch or cut slots or holes to

admit the insertion of the eyes N, Figs. 8 and 9. This tin (or other metal suitable for the purpose) we then make round, leaving it hollow for the insertion of the wire M through the eyes N, when the eyes N are inserted in or through the slots or holes in the rod F for the purpose of attaching it to the blind, this rod F to be attached to the blind, as above described, and to be detached by the pulling the wire M out from the eyes N on the inside of the rod F, which leaves the eyes N free from the rod F. These eyes N are made in the form shown in Figs. 8 and 9. These eyes N are attached to the slats E E E E E E by the usual method of small wire staples.

Having described the construction and operation of our improvement sufficiently to enable others skilled in the art to make and use our invention and improvements, we will proceed to state what we claim and desire to secure by Letters Patent of the United States.

We claim—

1. The constructing and arranging a blind that it may be shifted or reversed and worn first one side out and then the other without removing the hinges thereof.

2. The constructing and arranging the blind, hinges, and rod in the manner herein described, and for the purpose specified.

BYRON C. HOWELL.

A. B. THOMPSON.

E. D. SNYDER.

In presence of—

ABEL BURRITT,

CHAS. S. CARMICHAEL.