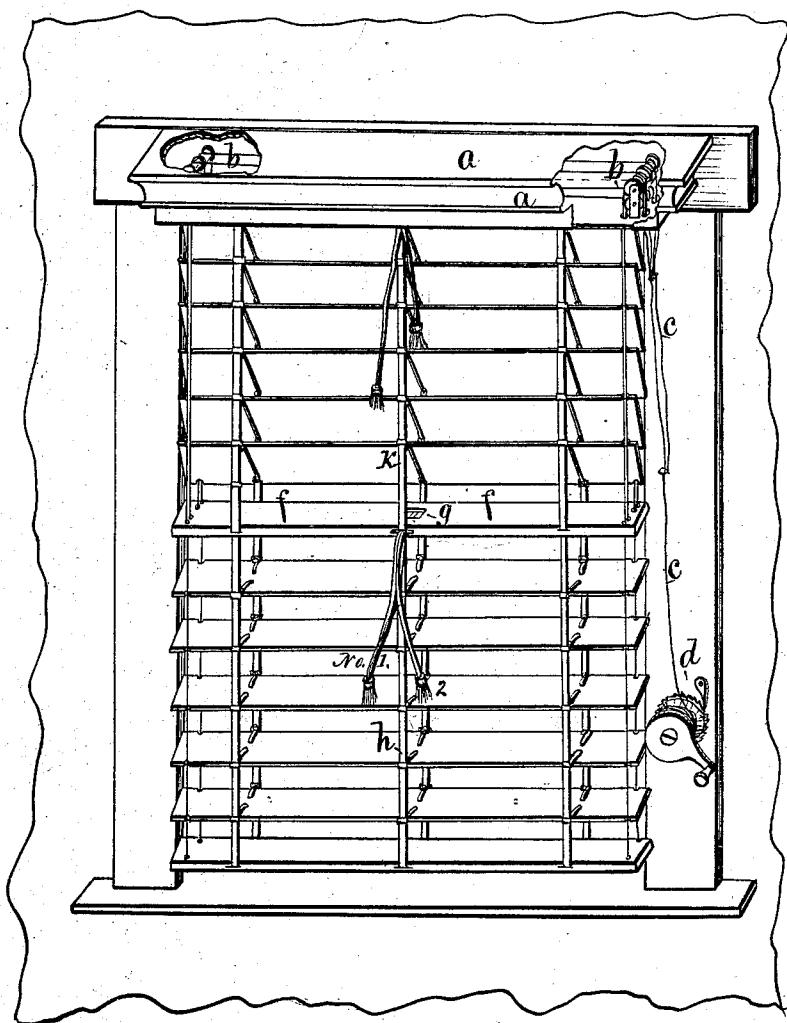


J. BRYAN.

Inside Blinds.

No. 168,221.

Patented Sept. 28, 1875.



Witness.

J. K. Marsh
R. G. Orwig.

Inventor,

John Bryan,
Thomas G. Orwig, Atty.

UNITED STATES PATENT OFFICE.

JOHN BRYAN, OF DES MOINES, IOWA.

IMPROVEMENT IN INSIDE BLINDS.

Specification forming part of Letters Patent No. **168,221**, dated September 28, 1875; application filed October 1, 1874.

To all whom it may concern:

Be it known that I, JOHN BRYAN, of Des Moines, in the county of Polk and State of Iowa, have invented an Improved Window-Blind, of which the following is a specification:

The object of my invention is to construct a Venetian window-blind in such a manner that the upper and lower parts can be adjusted independently of each other. It consists in dividing the blind-slats by a division-board, and suspending the lower half from the division-board to be operated by separate cords, as hereinafter fully set forth.

My drawing is a perspective view illustrating the construction and operation of my invention.

a a represent a hollow cornice designed to be attached to the top of the window, facing in any suitable way. *b b* represent a pair of double pulleys mounted in each end of the cornice in any suitable way. *c c* represent a double set of cords running over the pulleys *b*, and terminating in a single cord, which is attached to and winds upon the reel *d*, which has a ratchet to hold it stationary when the cord is wound upon it, and the blind thereby drawn up. *ff* is a horizontal division-board in the center of the blind. One set of the cords *c* terminates in this board, and the other set passes through and terminates at the bottom of the blind, where they are attached to the lower slat. The series of blind-slats are connected by means of suitable tapes and wires, to form flexible connections. *g* is a pulley, mounted in the middle of the division-board *ff*, over which an operating-tape passes. Nos. 1 and 2 are the ends of the central cord or tape *h*, connected with the edges of the

slats for the purpose of operating them. By pulling the ends, Nos. 1 and 2, the blind-slats can be alternately opened and closed. The ends of the central tape *h* on the upper half of the blind pass over a pulley mounted in the cornice.

By means of the division *ff* and independent central tapes *h* and *k* the upper and lower portions of the blind can be operated independently of each other—closed above and open below, or vice versa; and by means of the double set of cords *c c* the lower or under half of the blind can be drawn up and folded compactly against the division-board *ff*, so as to leave the lower portion of the window entirely unobstructed, and also at the same time leave the upper division or top half of the blind in an unobstructed position, so that its slats can be operated and opened and closed as may be desired.

I am aware that cords and pulleys have been used to open and close slats and raise and lower blinds, and that central bars are common in window-blinds; but I claim that my blind, having a suspended division-board and two independent tapes and pulleys, and a double set of elevating-cords, is new and greatly advantageous.

I claim as my invention—

In a window-blind, the suspended division-board *ff*, independent slat-operating tapes *h* and *k*, and double set of elevating-cords *c c*, substantially as and for the purposes shown and described.

JOHN BRYAN.

Witnesses:

J. K. MARSH,
M. E. ORWIG.