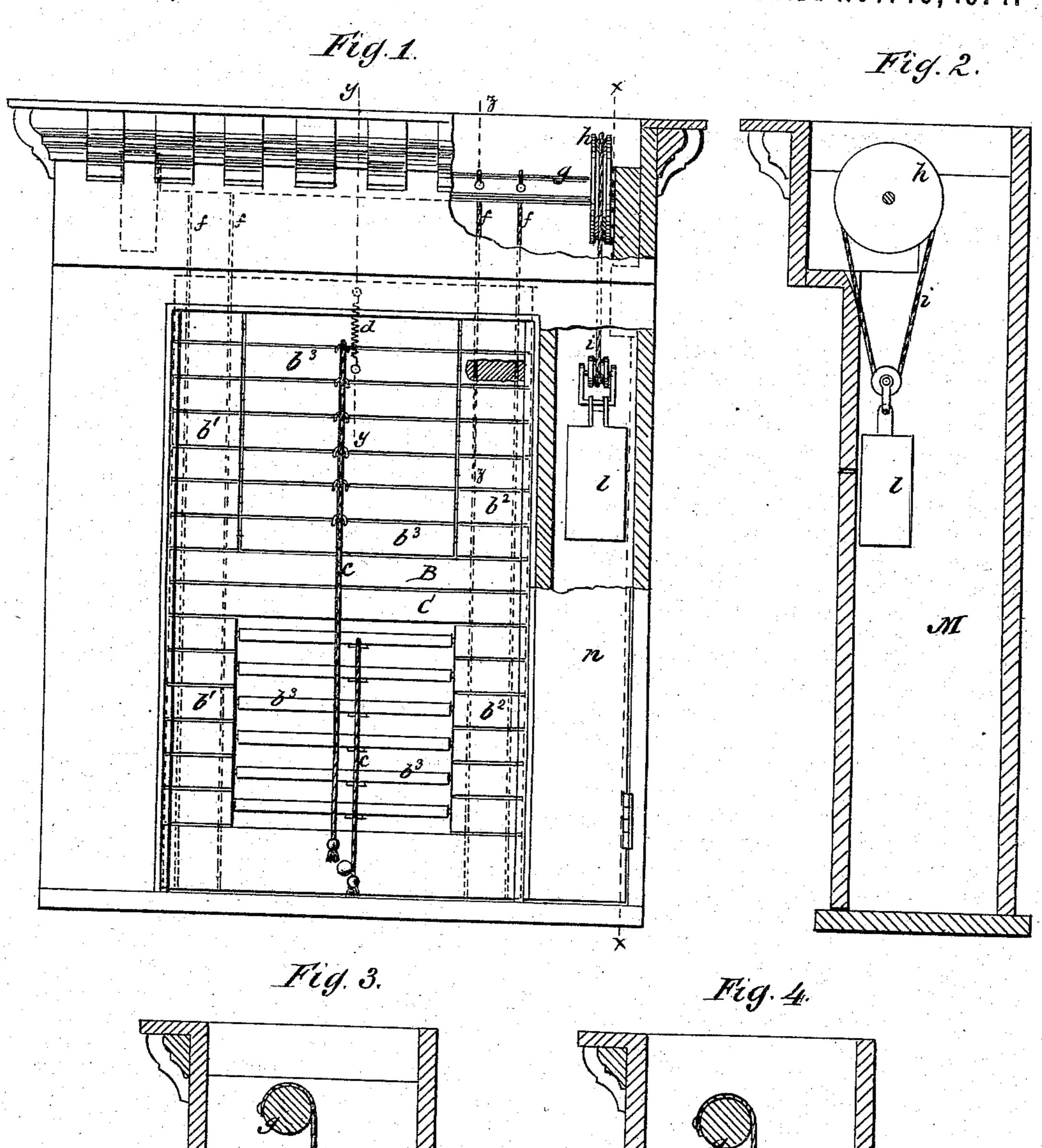
## F. C. MARTIN.

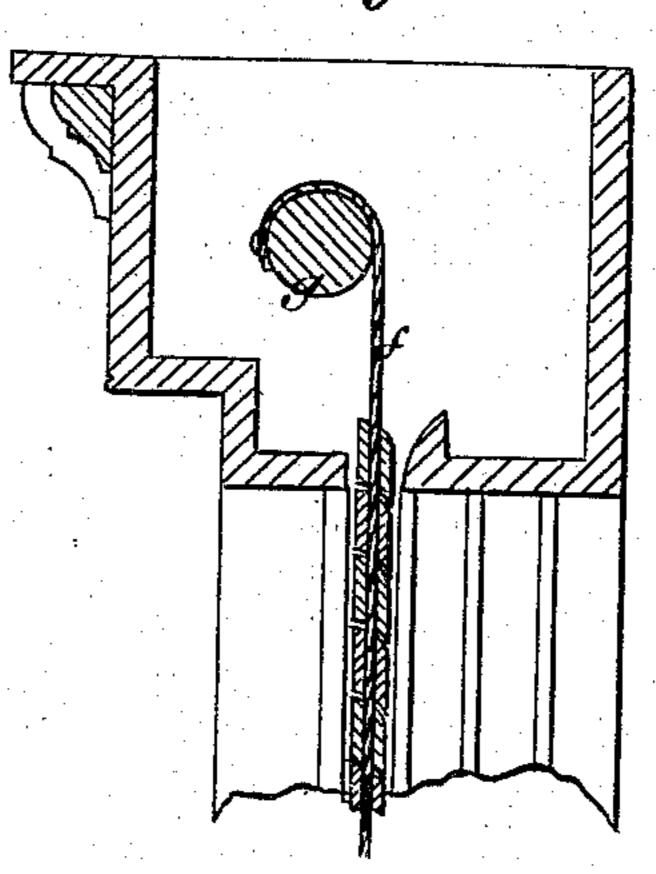
## Window-Shades or Venetian-Blinds.

No.156,644.

Patented Nov. 10, 1874.



Witnesses. c. Minneil H.J. Hutchinson



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## UNITED STATES PATENT OFFICE.

FRANCIS C. MARTIN, OF BROOKLYN, NEW YORK, ASSIGNOR TO JOHN H. BUTLER AND T. D. HUNTLING, OF NEW YORK CITY.

## IMPROVEMENT IN WINDOW-SHADES OR VENETIAN BLINDS.

Specification forming part of Letters Patent No. 156,644, dated November 10, 1874; application filed March 9, 1874.

To all whom it may concern:

Be it known that I, Francis C. Martin, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Window Shades or Screens; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements whereby provision is made for admitting light when the shade is down, and whereby, also, the cords which connect the slats of

the shade are concealed from view.

This invention consists in the combination of a roller and a window shade or screen composed of a series of slats adjustably pivoted in one or more portions or sections of the blind or screen, whereby the latter can be rolled and unrolled from the roller, and one or more of the slats adjusted, as hereinafter described. The invention further consists in combining, with the pivoted slats composing the window-shade, a cord for adjusting said slats to a horizontal or other position, and a spring for closing the slats when the cord is released, as hereinafter described.

In the accompanying drawing, Figure 1 is a face view of a window with my improved shade applied thereto. Fig. 2 is a vertical section taken in the line x x of Fig. 1. Fig. 3 is a vertical section taken in the line y y of Fig. 1. Fig. 4 is a vertical section taken in the

line  $z \bar{z}$  of Fig. 1.

The shade B is composed of slats or strips of wood, or other suitable material, connected together by cords or leather, or other suitable material, so as to admit of being rolled around a cylinder. In one or more desired portions of the shade a number of the slats or laths are divided into three pieces each, of about equal lengths. The end pieces  $b^1 b^2$  are connected together by the cords in the same manner as those which are left of the entire length. The central pieces  $b^3$  have their ends near their lower edges pivoted to the inner

ends of the end pieces  $b^1 b^2$ , and their upper edges connected by a cord, rod, or wire, c. The uppermost central piece,  $b^3$ , is connected to the slat next above it by means of a spring, d, which may be of metal, rubber, or other suitable material, and which serves to keep the central portions, and in line with the remaining portion of the shade, when desired.

When it is desired to admit light or air without raising or rolling up the shade, the cord, rod, or wire c is drawn down until the central pieces  $b^3$  are in a horizontal or other desired position, and secured in any suitable manner. When released, the spring d closes

the pieces  $b^3$  to their former position.

The cords ff, which connect the slats, instead of being double and passed on both sides of and between the edges of the slats, are passed through holes running edgewise through the slats or laths. By this means they are concealed from view, and prevented from exposure to wear and tear, which would result if they were arranged outside of the slats.

The upper ends of the cords f are attached to a cylinder or roller, g, which is provided with gudgeons or journals, and with a pulley, h, which may, if desired, be made in one piece with the roller. Over the pulley h passes a cord, i, to which is attached a weight, l, corresponding with the weight of the shade. A box, m, is provided in window-frame for the weight to travel in, which box is furnished with a door, n, to afford ready access thereto whenever desired. This weight balances the shade so as to hold it at any point to which it may be raised or lowered.

I am aware that inside blinds or shades have been made in sections, and pivoted so that such portions may be opened; but such are worked and operated by hinges secured to the sides of the window-frame, and do not

roll up.

What I claim as new, and desire to secure

by Letters Patent, is—

1. The combination, substantially as described, of a roller and a window shade or screen composed of a series of slats adjustably pivoted in one or more portions of the blind or screen, whereby the said shade can be rolled and unrolled from the roller, and one

or more of the slats adjusted, substantially as specified, for the object herein set forth.

2. In combination with the pivoted slats, the cord c for adjusting said slats to a horizontal or other position, and the spring d for returning the slats to a closed position when the cord c is released, substantially as herein shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 4th day of March, 1874.

FRANCIS C. MARTIN.

Witnesses:

A. J. DE LACY, FRANCIS CLARE BOWEN.