

J. W. SNAPP.
Window-Grating.

No. 214,595.

Patented April 22, 1879.

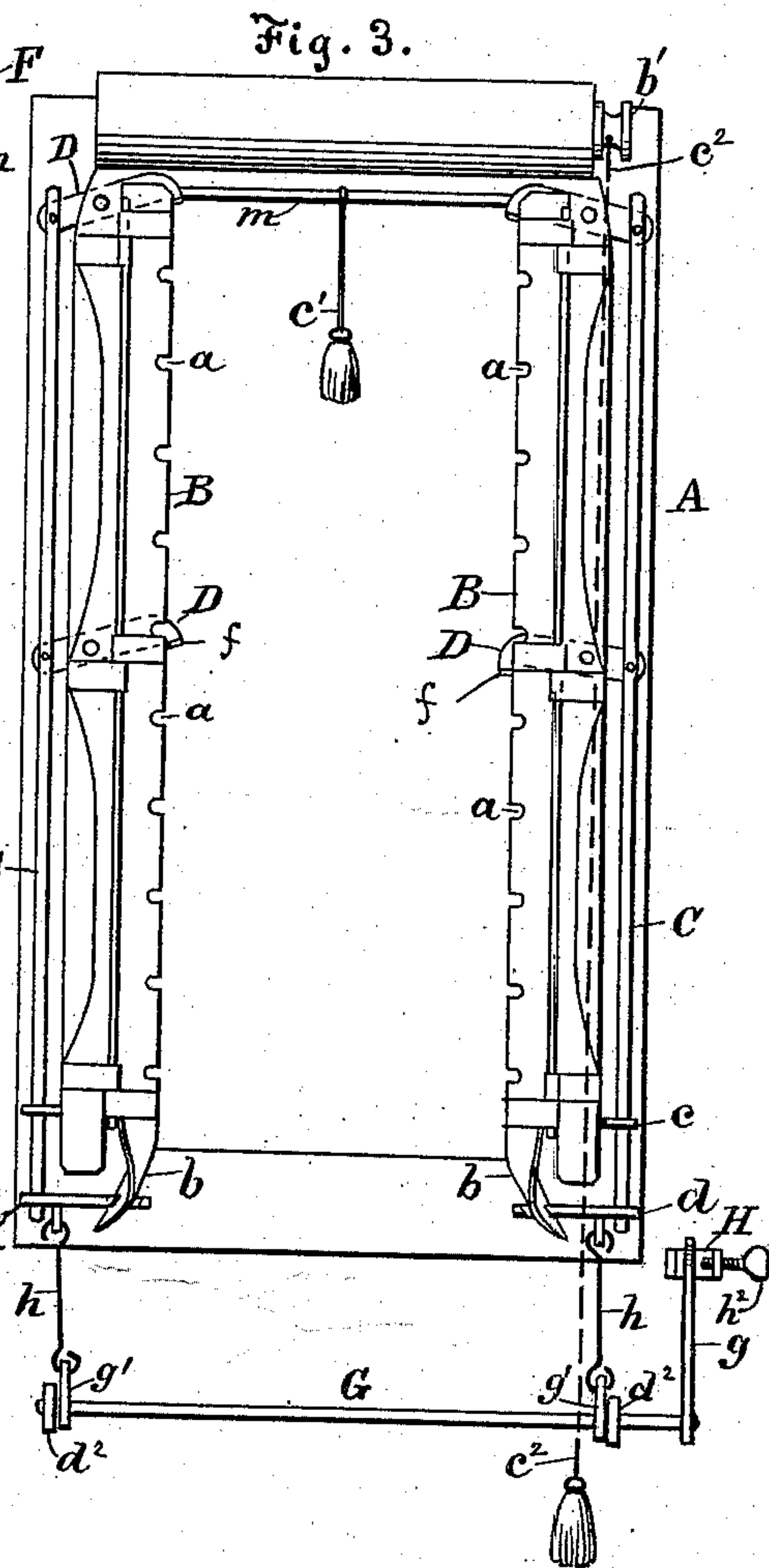
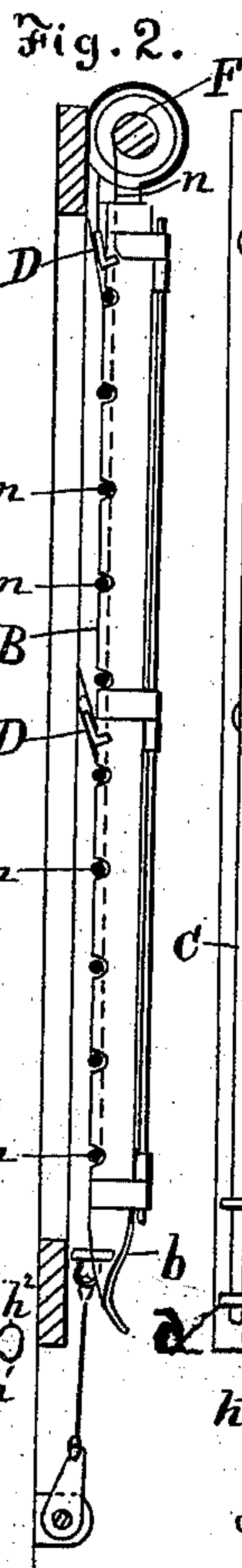
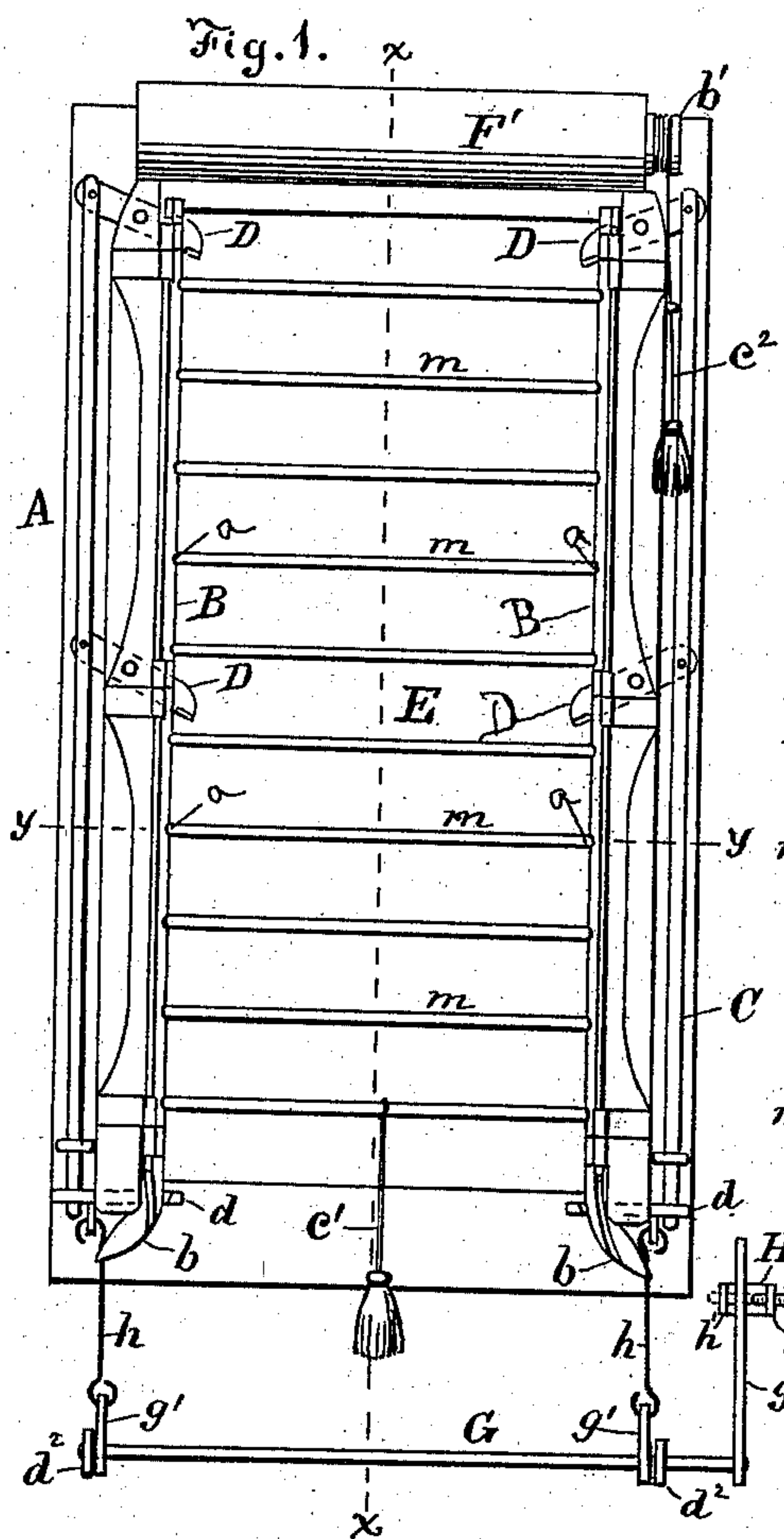


Fig. 4.

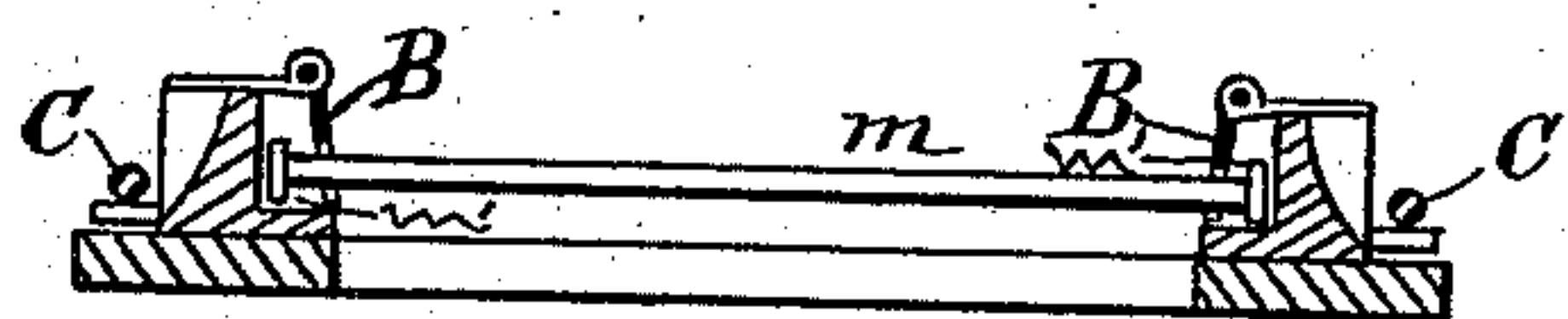


Fig. 5.



Fig. 6.

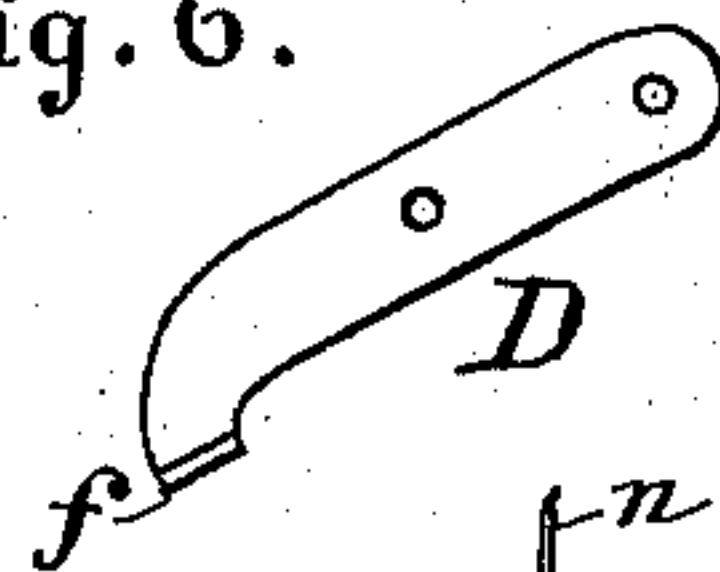
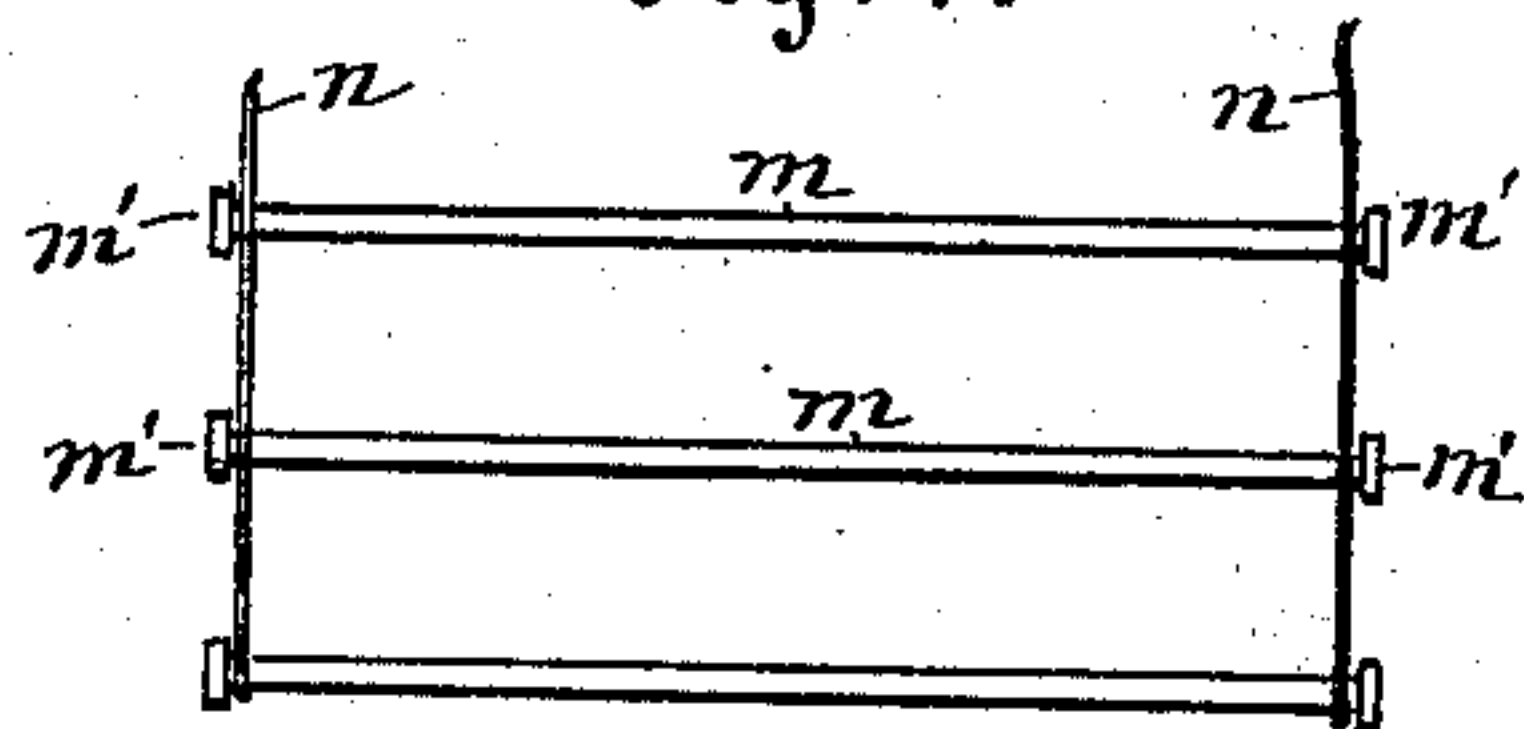


Fig. 7.



Witnesses :

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UNITED STATES PATENT OFFICE.

JAMES W. SNAPP, OF JASPER, TENNESSEE, ASSIGNOR OF ONE-THIRD HIS RIGHT TO URIAH SHERRILL AND JOHN H. SHERRILL, OF SAME PLACE.

IMPROVEMENT IN WINDOW-GRATINGS.

Specification forming part of Letters Patent No. **214,595**, dated April 22, 1879; application filed September 14, 1878.

To all whom it may concern:

Be it known that I, JAMES W. SNAPP, of the town of Jasper, in the county of Marion and State of Tennessee, have invented a Burglar-Proof Drop-Grating for Windows and Doors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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.

Figure 1 is a front elevation, showing the grate down and locked. Fig. 2 is a longitudinal vertical section on line *x x* of Fig. 1. Fig. 3 is a front elevation, showing the grate wound up on the roller. Fig. 4 is a transverse section on line *y y* of Fig. 1, showing grate-bar locked. Fig. 5 is a lower-end view, showing the notched guides. Fig. 6 is a view of the pivoted latch, detached, for locking the notched plates over the grate. Fig. 7 is a view of part of the grate detached.

My invention consists of a burglar-proof grate, adjusted to be securely locked over a window or door, and to be wound up out of the way on a roller when not in use, as hereinafter fully described.

A is the frame, of any suitable material, to be screwed to the inside of the window or door facings. B B represent lock-plates, having the notches *a*, and provided with coiled ends *b b*. These plates are hinged to the frame.

C C are rods, adjusted to slide vertically in the eyes *c c*, and provided at the lower ends with the guide-blocks *d d*, having notches *d'* to receive the coiled ends *b* of the lock-plates. D represents plates pivoted to the rods C and to the frame A. The inner ends of these plates, extending inside of the lock-plates, are provided with hooks or shoulders *f*, forming catches to hold in place the lock-plates when closed over the grate-bars, as shown in Figs. 1 and 2 of the drawings.

E represents the grate, formed of bars *m*, having flat heads *m'*, and connected by chains or cords *n*. The lower bar of the grate is provided with a cord, *c'*.

F is a roller, inclosed in a suitable case, F', having bearings for the roller, and provided

with a pulley, *b'*, to receive the cord *c'*. G is a rod adjusted in bearings *d² d²*, fastened to the base-board, near the floor, and is provided with a crank, *g*, and arms *g' g'*, having holes at their upper ends to receive the connecting-rods *h h*, the upper ends of which are attached to the guide-blocks *d*. H is a holder, screwed to the upper part of the base-board to fasten the crank *g*, which holder consists of a plate, provided with lugs *h¹*, having holes with screw-threads to receive the thumb-screw *h²*, which, being screwed in the lugs over the end of the lever, holds it securely in place.

When the grate is not required to be in use the lever is released from the holder by unscrewing the thumb-screw, and the downward movement of the lever slides downward the rods C, throwing up the latches D, unlocking the plates B, and sliding downward the notched guide-blocks *d*, which, operating on the coiled ends *b*, open outward the lock-plates, thus releasing the grate, which, by means of the cord *c'* on the pulley *b'*, is wound up on the roller, and the crank is returned to and fastened in the holder, out of the way; and when the grate is to be adjusted over a window or door the lever is again released from the holder and turned downward, opening the lock-plates, and the grate is drawn down, by means of the cord *c'*, in position for the notches on the lock-plates to fit over the bars of the grate. The lever is then raised to its position in the holder, which slides upward the rods C and notched guide-blocks, which, operating on the coiled ends *b*, closes the lock-plates over the grate, and moves the catches D into position to lock the plates B, and the lever is fastened in the holder by screwing in the thumb-screw. In this position the notches *a* of the plates B fit over the bars of the grate, and the outer sides of these plates bear against the inner sides of the flat heads of the grate-bars, thus holding securely each bar from the liability of being moved vertically or laterally.

I contemplate that the above-named operating devices may be inclosed in a suitable casing, forming a neat and ornamental finish in the room.

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

1. The burglar-proof grate E, consisting of

bars *m*, connected by chains or cords *n*, in combination with the roller *F* and the locking-plates *B*, operated by devices substantially as and for the purposes described.

2. In combination with the grate *E*, consisting of bars *m*, having flat heads *m'*, connected by chains or cords *n*, the lock-plates *B*, hinged to the frame *A*, and provided with the notches *a* and coiled ends *b*, and actuated by the notched guides *d*, substantially as and for the purposes described.

3. The plates *D*, having shoulders or hooks *f*, and pivoted to the frame *A*, and the rods *C*, for locking the plates *B*, substantially as and for the purposes described.

4. The combination of the plates *B*, having notches *a* and coiled ends *b*, the rods *C*, having notched guides *d*, the pivoted catches *D*, the grate *E*, adapted to be wound up on the roller *F*, and the rod *G*, having the crank and arms *g g' g'*, and connecting-rods *h*, substantially as and for the purposes described.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

JAMES W. SNAPP.

Witnesses:

JOHN L. MINTER,
THOMAS P. HALL.