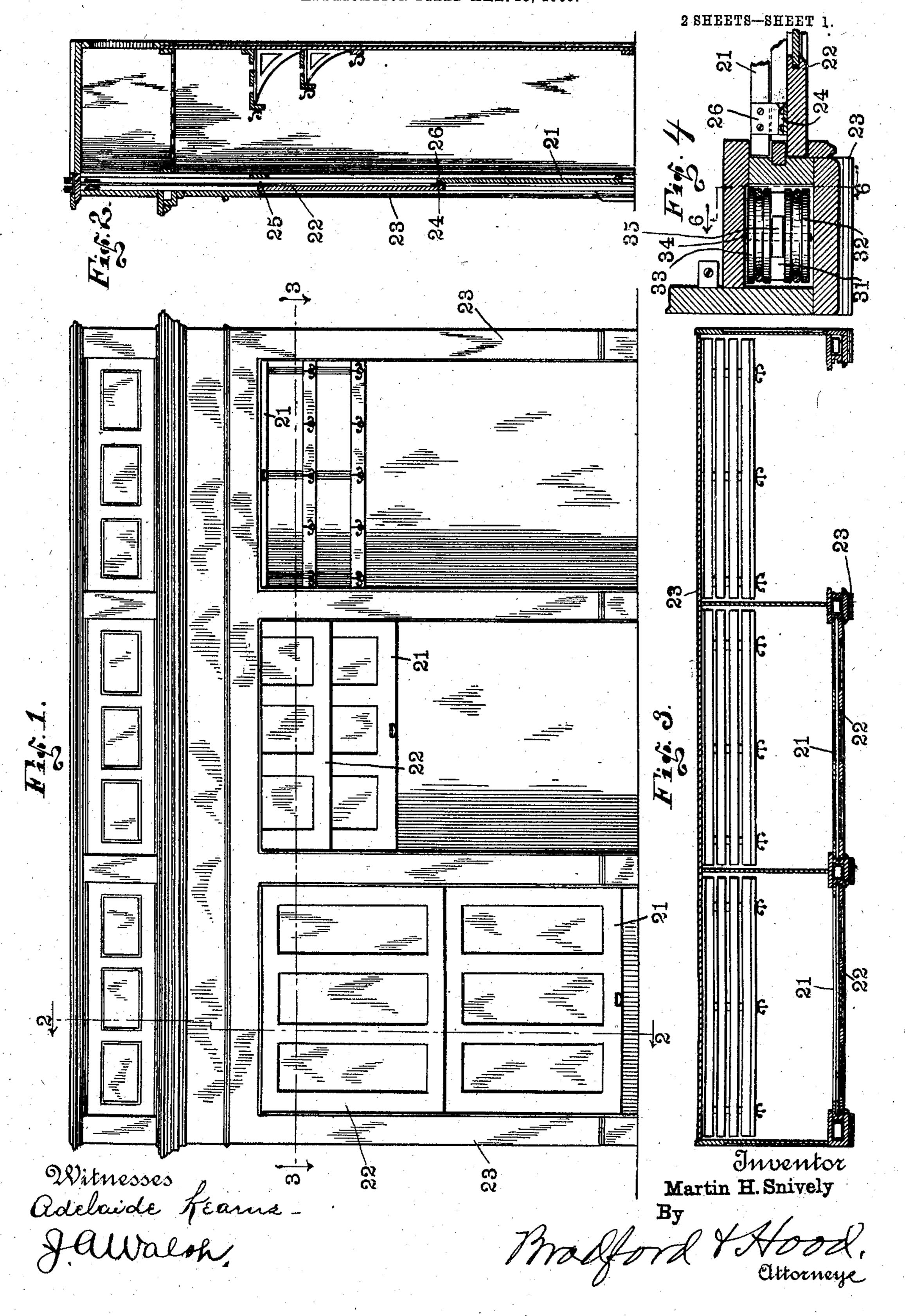
M. H. SNIVELY.

DOOR HANGING APPARATUS.

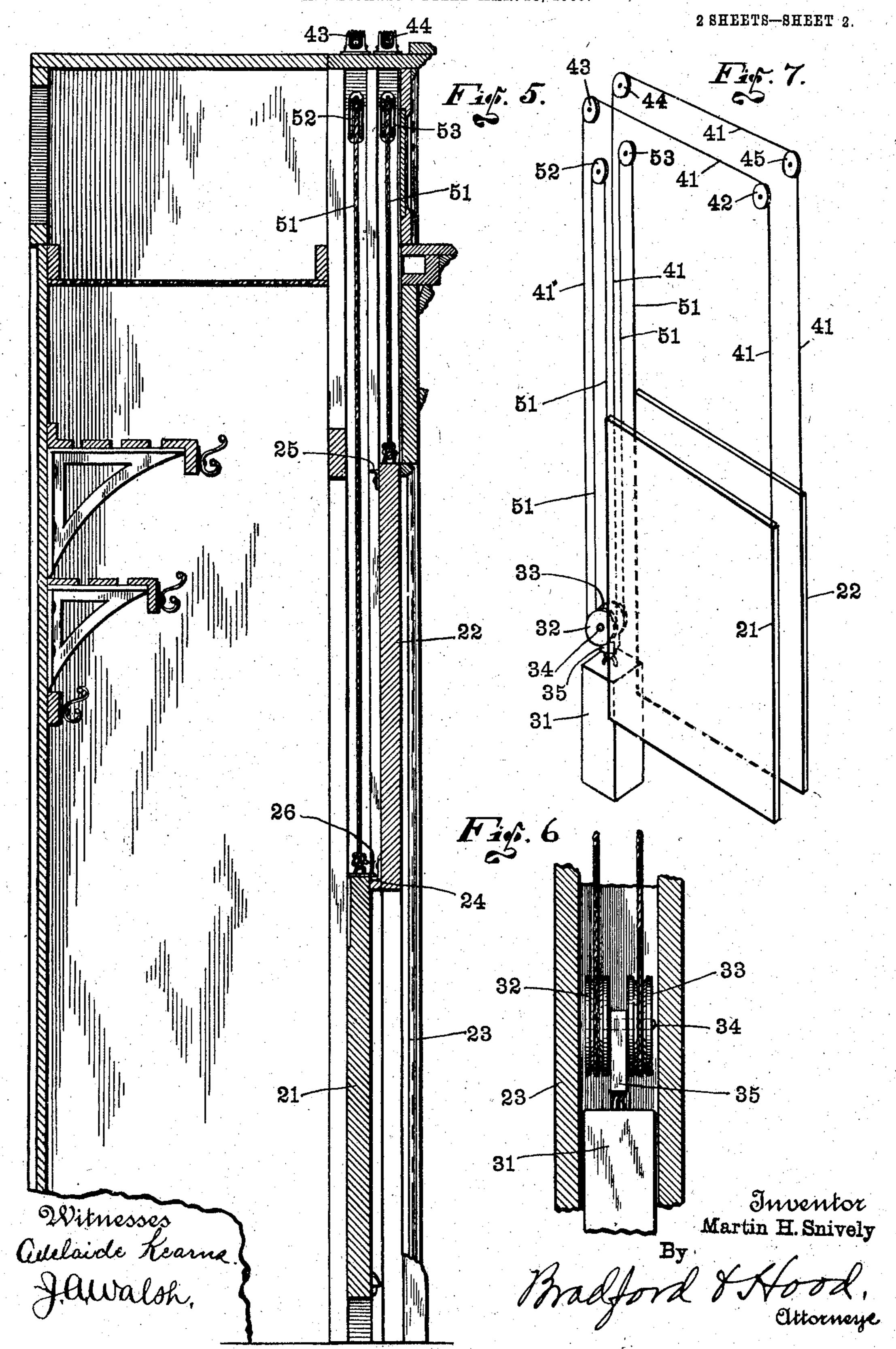
APPLICATION FILED MAR. 18, 1905.



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## United States Patent Office.

MARTIN H. SNIVELY, OF COLUMBUS, INDIANA, ASSIGNOR OF ONE-HALF TO EDWARD H. EVERROAD, OF COLUMBUS, INDIANA.

## DOOR-HANGING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 791,507, dated June 6, 1905.

Application filed March 18, 1905. Serial No. 250,850.

To all whom it may concern:

Be it known that I, MARTIN H. SNIVELY, a citizen of the United States, residing at Columbus, in the county of Bartholomew and State of Indiana, have invented certain new and useful Improvements in Door-Hanging Apparatus, of which the following is a specification.

The principal object of my said invention is to provide a means whereby the sliding vertically-movable doors of a structure may be conveniently and easily controlled and operated by a single weight, as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof and on which similar reference characters indicate similar parts. Figure 1 is a front elevation of a threesection wardrobe provided with doors ar-20 ranged and operating in accordance with my invention, the doors of the several sections being shown in varying positions; Fig. 2, a central vertical sectional view of the same at the point indicated by the dotted line 22 in 25 Fig. 1; Fig. 3, a horizontal sectional view thereof at the point indicated by the dotted line 3 3 in Fig. 1; Fig. 4, a detail horizontal sectional view at one corner of the structure on a considerably-enlarged scale; Fig. 5, a view 3° similar to Fig. 2, but on an enlarged scale and showing the ropes or cords by which the doors are operated; Fig. 6, a detail view at the point indicated by the dotted lines 6 6 in Fig 4, illustrating especially the weight by 35 which the doors are operated and the sheaves connected to said weight; and Fig. 7, a diagrammatic perspective view illustrating the doors, cords, and weights and showing how both doors and their hanging-cords are oper-40 ated by a single weight.

The doors 21 and 22 are mounted in grooves in the frame 23 very much as window-sash are mounted in their frames. The upper door-section 22 is provided with two projections 24 and 25 near the upper and lower edges, respectively, and the lower door-section 21 is provided with a single projection 26, which extends in between the projections 24

and 25 and is adapted to come in contact therewith alternately as the lower section is moved 50 up and down, and thus move said upper section with it in its travel.

A single weight 31 is provided. Connected to this weight are two sheaves 32 and 33, usually upon a single axle 34, mounted in any 55 suitable ear or housing, as 35, connected to the weight.

One cord, 41, is connected to the corner of both the doors 21 and 22 upon one side, starting, for example, from the outer corner of 60 the door 21 and running thence up over a sheave 42, thence across to a sheave 43, thence down to the sheave 32 on the weight, thence up to the sheave 44, thence across the sheave 45, and thence down and connected to that 65 corner of the door 22 which corresponds to the corner of the door 21 to which the other end of said cord is connected. Another cord, 51, starts from that corner of the door 21 horizontally opposite to that to which the cord 41 70 is connected and passes thence up around the sheave 52, thence down around the sheave 33, attached to the weight 31, thence up to the sheave 53, and thence down to the corner of the door 22 corresponding to that corner of 75 the door 21 to which the first end is attached.

The operation of doors embodying my said invention is as follows: Assuming the doors to be closed, as those are which are illustrated at the left-hand side of Fig. 1 of the drawings, 80 and it being desired to open them, the operator lifts the lower door (commonly by means of a handle provided for the purpose) until the projection 25 thereon strikes the projection 24 on the door 22. From that point the 85 two doors travel upward together until they are entirely open. In returning the door 21 is first pulled down until the projection 26 thereon strikes the projection 24 on the door 22. From that point the two doors travel to- 90 gether until they are entirely closed. By the arrangement of cords and sheaves described only a single weight is necessary to operate both doors, and they are equally balanced at all points and at all times.

Having thus fully described my said inven-

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

1. The combination, with a two-section door, of a single weight having two sheaves 5 attached thereto, and two cords running over said sheaves and over other suitable sheaves in the adjacent framework, the ends of each cord being attached to the two nearest upper corners of the sections respectively.

2. The combination, with a two-section door, of a single weight having two sheaves attached thereto, and two cords running over said sheaves and over other suitable sheaves | Frank M. Carr.

in the adjacent framework, the two ends of one cord being attached to the said door-sec- 15 tions at one side, and the two ends of the other cord being attached to the said door-sections at the other side.

In witness whereof I have hereunto set my hand and seal, at Columbus, Indiana, this 6th 20 day of March, A. D. 1905.

MARTIN H. SNIVELY.

Witnesses:

EDWARD H. EVERROAD,