D. I. Stagg,

Door Spring.

No. 34,075. Patented Jan. 7, 1862.

Fig. 1

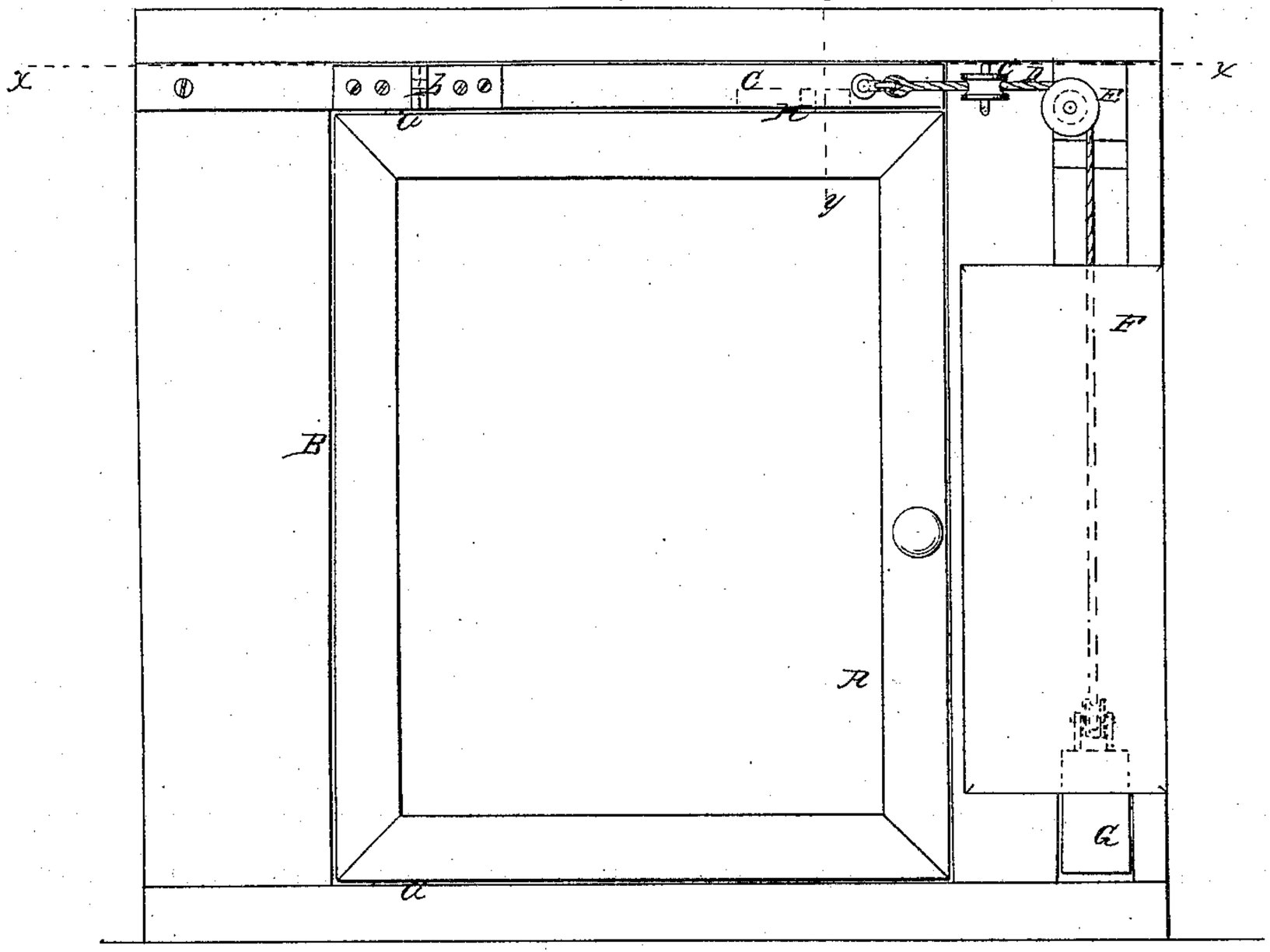


Fig. 3.

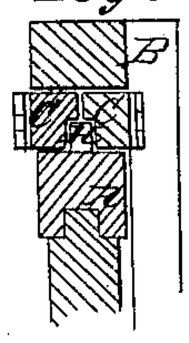
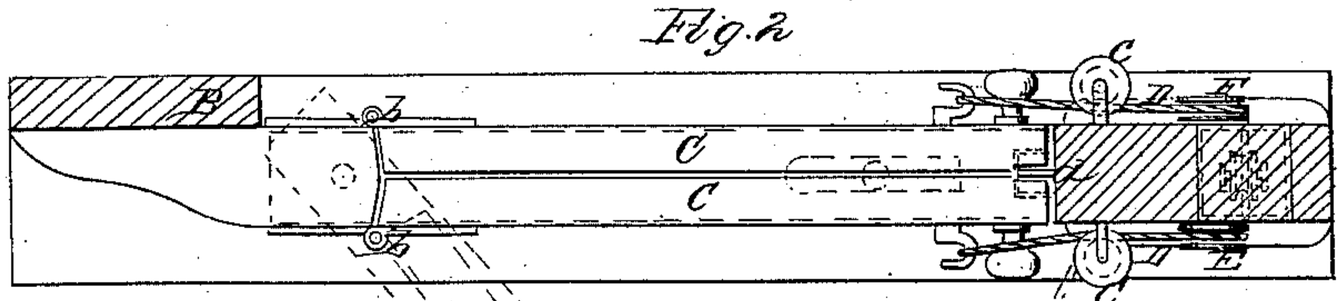


Fig. 2



Witnesses.
James Land
Charlie Holden

Inventor.
David I. Stagg

UNITED STATES PATENT OFFICE.

DAVID I. STAGG, OF NEW YORK, N. Y.

IMPROVED DEVICE FOR CLOSING DOORS.

Specification forming part of Letters Patent No. **34,075**, dated January 7, 1862.

To all whom it may concern:

Be it known that I, DAVID I. STAGG, of the city, county, and State of New York, have invented a new and Improved Door-Closing Device; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a front view of my invention; Fig. 2, a horizontal section of the same, taken in the line *x x*, Fig. 1; Fig. 3, a section of the upper part of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improved door-closing device, which is designed to be applied to doors that open and swing both ways.

The object of the invention is to obtain a means whereby the door may be kept in a closed state not only when the draft is equal at both sides of the door, but also when the draft is greater at one side of the door than at the other side.

The invention consists in applying weights or springs to the door through the medium of hinged bars or strips arranged substantially as herein set forth.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a door, which may be constructed in the usual or in any proper way, and hung in a frame B, either by means of hinges or by pivots *a a*, as shown in Fig. 1. The door A is allowed to swing both ways in its frame B, and to the upper part of the door-frame there are attached two bars or strips C C—one at each side of the frame B—by hinges *b b*, and the free or loose end of each bar or strip C has a cord D attached. The cords D pass behind pulleys *c* at each side of the frame B and over pulleys E, extend down into a box F in the frame B, and are connected at their lower ends and pass through a sheave at the upper end of a weight G, which is allowed to rise and fall freely in the box F.

The weight G, it will be seen, has a tendency to keep the bars or strips C C in contact with the sides of the frame B, or with a stop *d*, attached thereto. The bars or strips C C may also bear directly against the door A or against a vertical pin or projection H at its upper end, as shown clearly in Fig. 3.

From the above description it will be seen that the weight G has a tendency to keep the door A in a closed state on account of the bars or strips C C acting against the door, and it will also be readily seen that in case a draft is stronger at one side of the door than at the other side a separate cord and weight may be used with each bar or strip C, a heavier weight being used for the bar or strip that bears against the side of the door against which the greatest pressure is required. This is a very important feature, as it effectually prevents the swinging of the door by strong drafts—a result which occurs in the use of doors arranged in the ordinary way for swinging in both directions.

Instead of weights, springs may be applied to the bars or strips C C. Any of the door-springs in use may be applied. Weights, however, would be preferable in most cases, as they are not, like springs, liable to become inefficient by use, their action being constant.

In cases where the invention is applied to double doors and weights are employed the cords of the latter extend back over suitable pulleys to the part of the frame where the doors are hinged, so that the weights may be out of the way and the edges of the doors allowed to be in contact when closed.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the hinged bars or strips C C and the weight or weights G, arranged and applied to the door as and for the purpose set forth.

DAVID I. STAGG.

Witnesses:

JAMES LAIRD,

RICHARDSON GAWLEY.