(Model.)

I. SOMERS.

SHEAVE FOR SLIDING DOORS.

No. 257,401. Patented May 2, 1882.

Fig. 1

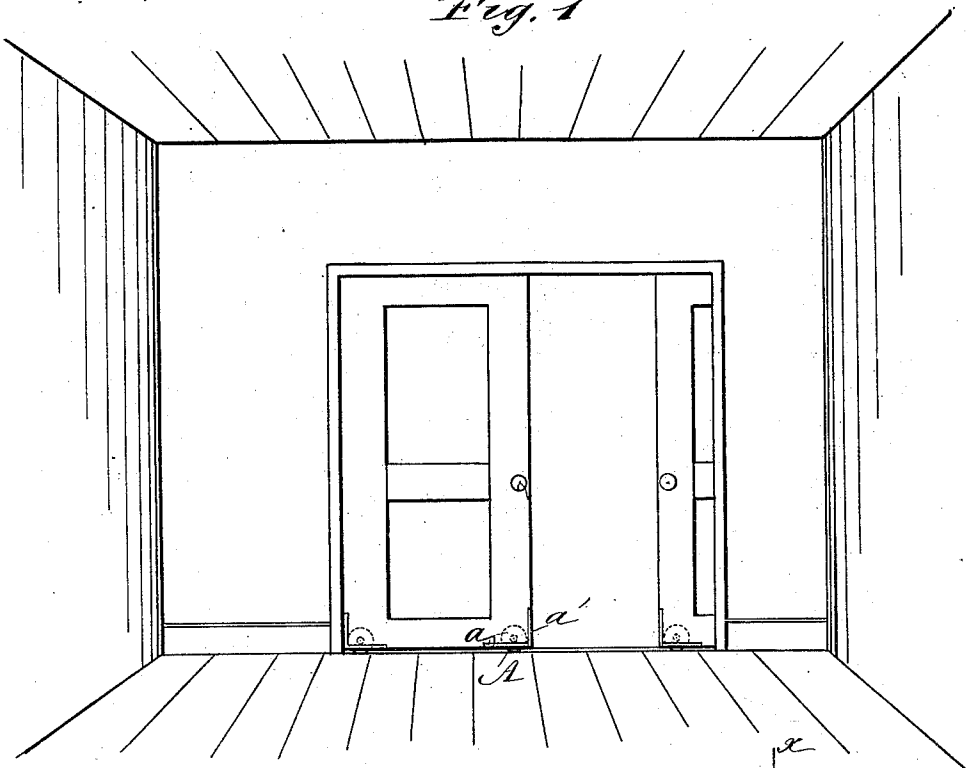


Fig. 2

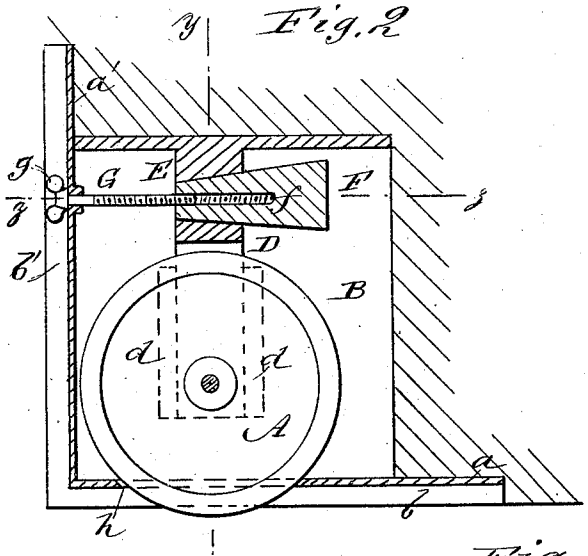


Fig. 3

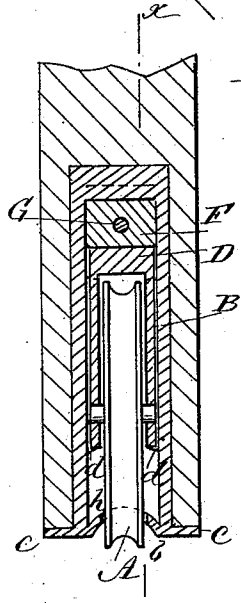
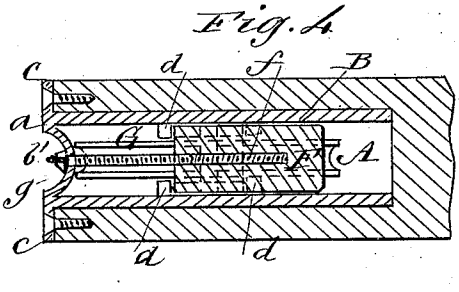


Fig. 4



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UNITED STATES PATENT OFFICE.

ISAAC SOMERS, OF DETROIT, MICHIGAN.

SHEAVE FOR SLIDING DOORS.

SPECIFICATION forming part of Letters Patent No. 257,401, dated May 2, 1882.

Application filed January 25, 1882. (Model.)

To all whom it may concern:

Be it known that I, ISAAC SOMERS, of Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Sheaves for Sliding Doors, of which the following is a full, clear, and exact description.

The object of this invention is to provide means for the vertical adjustment of the sheaves or rollers of sliding doors, whereby the doors may be readily raised or lowered on their sheaves, when desired, to compensate for any settling or irregularity in the floor or supports on which the sheaves travel.

The invention consists of a door-sheave made with an adjusting attachment, such as a wedge, whereby the sheave can be moved outwardly or inwardly in respect to its casing, so that when the sheave is applied to the door the latter may be raised or lowered, when desired, by operating the wedge, as will be hereinafter more fully set forth.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an elevation of a sliding door having my improved sheaves applied thereto. Fig. 2 is a sectional elevation taken on the line *x x* of Fig. 3. Fig. 3 is a similar view taken on the line *y y* of Fig. 2, and Fig. 4 is a sectional plan view taken on the line *z z* of Fig. 2.

The sheave A is inclosed in the casing B, which is let into a recess cut in the corner of the door. The casing is formed with the angle-plates *a a'*, which are concaved, as shown at *b b'*, Figs. 3 and 4, and formed with the flanges *c c*, through which screws pass into the edge and bottom of the door for securing the casing in the recess. The sheave is journaled in the saddle D, which is adapted to slide in the ways formed by the flanges *d d*, cast upon the inside of the casing, as shown in Fig. 3 and in dotted lines in Fig. 2. The upper wall of the casing, immediately above the ways in which the saddle moves, is formed with the rib or projection E. Between this rib or projection and the upper end of the saddle, is placed the wedge F, by which the sheave may be adjusted.

The movement of the wedge for adjusting the sheave is accomplished from the outside of the door by means of the screw-rod G, which enters the screw-tap *f* in the wedge. The outer end of this screw-rod is provided with the thumb-nut *g*, which rests in and is protected by the concave *b'* of the vertical plate *a'*, as shown clearly in Figs. 2 and 4. The lower edge of the sheave protrudes through the slot *h*, made through the angle-plate *a*, as shown in Fig. 2, so as to rest upon the rail upon which the door moves, and to clear the door from the rail and the floor. When it is desired to adjust the sheaves it is only necessary to turn the screw-rod *g* in one direction or the other, as circumstances may require, which will cause the wedge to be drawn forward or forced back, and the sheave moved out or in with respect to the casing, and the door accordingly raised or lowered. By this means the door may be readily adjusted without removing it from its track or support, so as to compensate for any settling or irregularity of the floor or support, so that the door may always be made to run free and easy, and so that its edge will always make a tight joint with the casing or joint of the door, and in case there are two opposing doors they may always be adjusted so that their meeting edges will come squarely together and make a tight joint. The concaved formation of the angle-plates gives them increased strength, and the plates protect the corners of the door, and owing to the flanges *c c* and the screws they act as clamps to prevent the corners from splitting or parting where the recesses are made. Besides, by means of the angle-plates and the casing the sheave may be placed very close to the edges of the door, causing the door to run steady upon its support.

I do not confine myself to the use of the adjusting attachment in connection with sheaves to be attached to the bottom of the door, as the casing may be formed with depending arms or plates, whereby it may be attached to the upper edge of a door, and thus suspend the door upon a track or support, the wedge serving to adjust the sheave and door in the same manner as just described.

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

1. In a door-sheave, the wheel A, adapted to have vertical movement, in combination with

the saddle D, the wedge F, and means for adjusting the wedge, substantially as described.

2. The wheel A, journaled in the saddle D, in combination with the wedge F and the casing formed with the flanges *d d*, substantially as described.

3. The casing formed with the guttered or concaved angle-plates *a a'*, in combination with the wedge F and screw G, substantially as and for the purpose set forth.

4. The combination, with the vertically-movable wheel A and wedge F, of the screw-rod G, secured to the wedge and reaching to the outside or edge of the casing, substantially as and for the purpose set forth.

5. The casing formed with the plates *a a'* and flanges *d d* and E, in combination with the wheel A, saddle D, wedge F, and screw-rod G, substantially as and for the purposes set forth.

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Witnesses:
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JOHN B. CONSIDINE.