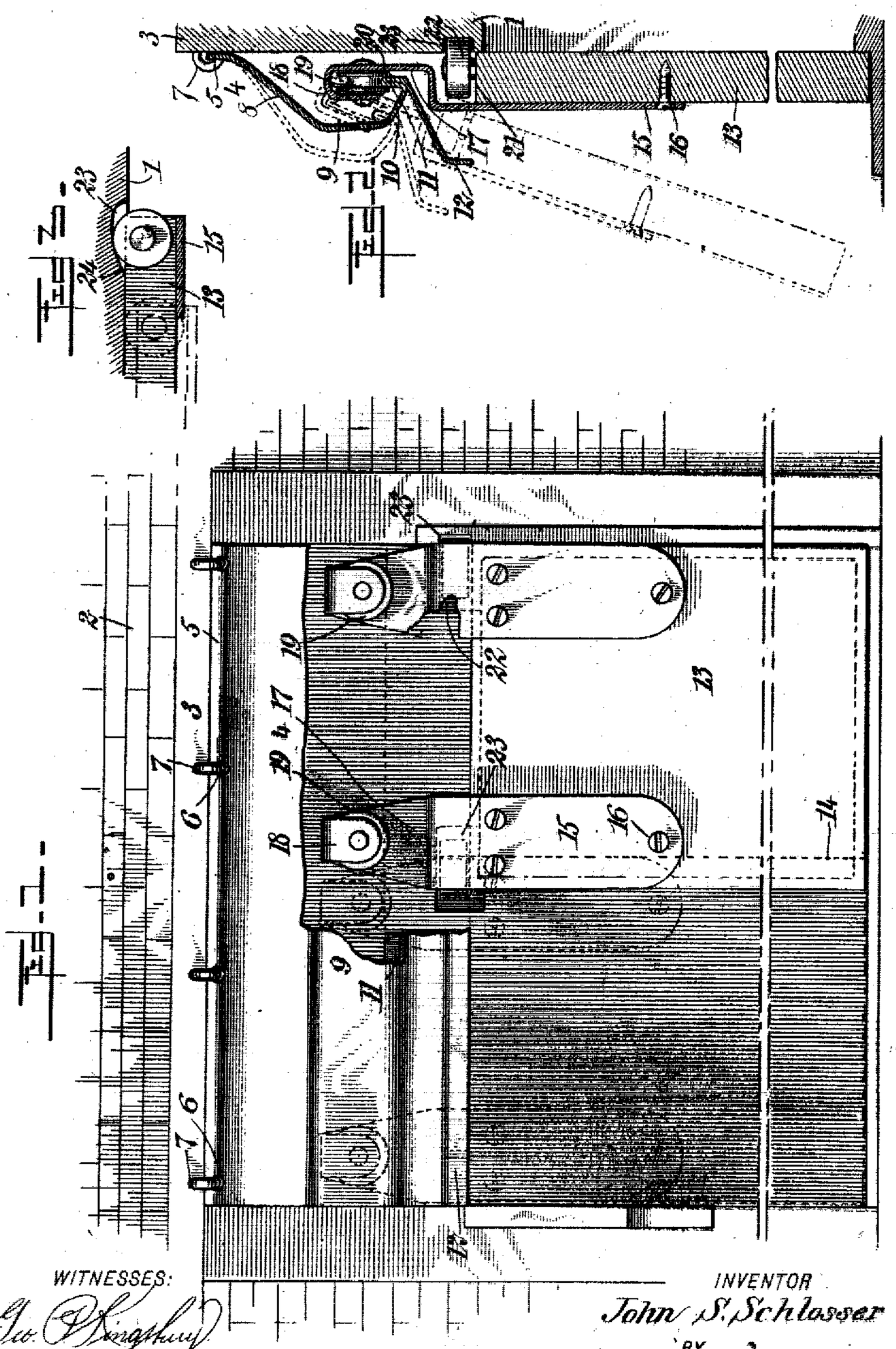
No. 825,422. PATENTED JULY 10, 1906.

J. S. SCHLOSSER.

SLIDING DOOR.

APPLICATION FILED AUG. 22, 1905.



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SLIDING DOOR.

No. 825,422. Specification of Letters Patent. Patented July 10, 1906.

Application filed August 22, 1905. Serial No. 275,197.

To all whom it may concern:

Be it known that I, JOHN SEBASTIAN SCHLOSSER, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Sliding Door, of which the following is a full, clear, and exact description.

This invention relates to sliding doors such as used on stables and cars.

The object of the invention is to produce a sliding door which is hung in a simple manner, which may be readily opened and closed, and which will operate to close the doorway tightly when the door occupies its closed position.

The invention consists in the construction and combination of parts more fully described hereinafter and definitely set forth in the claims.

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

Figure 1 is a front elevation showing the door as applied in practice, certain parts being broken away. Fig. 2 is a vertical section through the parts shown in Fig. 1 and likewise broken away. This view also represents in dotted outline a position which the door may assume. Fig. 3 is a horizontal section taken at one of the upper corners of the door and illustrating more fully the manner of guiding the door upon the door-frame.

Referring more particularly to the parts, 1 represents a door-frame provided in a wall 2, such as a stable-wall. In applying my invention to the lintel 3 of the door-frame I attach a horizontally-disposed hood 4. The construction of this hood is shown most clearly in Fig. 2. The body of this hood presents the general form of a channel, the gutter of the said channel being disposed inwardly and toward the face of the sill of the door-frame. At the upper edge of the hood a flange 5 is formed, which is provided at suitable points with openings 6, enabling staples 7 to be driven therethrough and secured in the sill 3. Below the flange 5 the material of the hood inclines outwardly, as indicated at 8, so as to present an inclined cheek. Beyond this cheek the material presents a vertical cheek 9, which terminates below in an inwardly-bent flange 10. At its lower edge this flange 10 is bent upwardly and doubled upon itself, so as to form a rail 11, which rail extends longitudinally of the hood and extends completely from end to end thereof, so as to constitute a track, as will be readily understood. Beyond the rail 11 the material of the hood is bent downwardly, so as to form an outwardly-inclined apron 12, which covers the upper edge of the door 13 in a manner which will appear more fully hereinafter. The door 13 consists simply of a rectangular panel which fits substantially the dimensions of the doorway 14. At the upper edge of the door 13 I attach hangers 15, the lower portions of which consist of plates attached by means of screws 16 or similar fastening devices to the outer face of the door. The upper extremities of the hangers are offset inwardly, so as to form necks 17, which project vertically between the face of the sill 3 and the aforesaid rail 11. The upper extremities of the necks 17 are bent over, so as to form yokes 18, in each of which a roller 19 is mounted. The construction and connection of both hangers are identical. The rollers 19 are preferably formed with flanges 20 at their edges, which prevent the rollers from becoming displaced when resting upon the rail, as indicated in the drawings. Near the corners of the door 13 and upon the upper face 21 thereof I attach rollers 22, and the faces of these rollers project slightly beyond the inner face of the door 13, as indicated most clearly in Fig. 2. At suitable points I provide recesses 23 in the outer face of the sill 3, which the projecting portions of these rollers occupy when the door is in its closed position. The bottoms of these recesses incline, as indicated at 24, in the direction in which the door is to open. The recesses 23 are of such depth that when the door occupies its closed position they will permit the inner face of the door to lie against the outer face of the lintel 3 and the door-frame 1. In this way a tight closure is made. When, however, the door is to be opened, it is simply forced to the left. The rollers 22 will then ride up on the inclined faces 24 and roll upon the outer face of the lintel 3. In so doing they will hold the door 13 out a slight distance from the door-frame, so that no friction is developed in moving the door, as described. In this connection it should be understood that the openings 6 are sufficiently large with respect to the staples 7 to permit a free outward movement of the hood 4. Attention is called to the fact that there is no attachment between the lower portion of the door and the door-frame, so

that if the door is struck on its inner side it can be readily pushed outwardly into some such position as that indicated in dotted lines in Fig. 2. It will be observed that the action of gravity alone operates to hold the door against the lintel and against the door-frame, and it should also be evident that by reason of the recesses 23 the door tends to remain in its closed position.

While I have described the member 4 as a hood which operates to hide the hangers from view, evidently its principal function is to operate as a guide and support for the door in being slid to its open or closed position.

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

1. In combination, a door-frame, a guide attached thereto and adapted to swing outwardly from said door-frame, a door hung from said guide, rollers carried by said door, rolling on said door-frame, and holding said door out of contact with said frame, said door-frame having recesses lying opposite said rollers when said door is closed, whereby said door may come against said door-frame.

2. In combination, a door-frame, a guide consisting of a hood extending longitudinally of said door-frame and attached thereto above, a track formed beneath said hood, a door having a hanger running on said track, rollers carried by said door, running on the face of said door-frame and holding said door out of contact therewith, said door-frame having recesses receiving said rollers to permit said door to come against said door-frame.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN SEBASTIAN SCHLOSSER.

Witnesses:

OSCAR F. BRADY,

SETH L. SHINN.