UNITED STATES PATENT OFFICE.

FRANK J. WEBB, OF NEW YORK, N. Y.

DEVICE FOR HANGING DOORS.

966,276.


To all whom it may concern:

Be it known that I, FRANK J. WEBB, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Device for Hanging Doors, of which the following is a full, clear, and exact description.

My invention relates to moving doors and more particularly to doors of the kind which move edgewise and commonly designated as "sliding doors", the special purpose of my improvement being to so connect a plurality of such doors by a system of levers, forming a mechanical movement, as to render one door controllable by motions of another, thereby rendering the doors not only positive, but interdependent, in their movements.

More particularly stated, I provide two or more doors lying in the same plane and movable toward and from each other, and I connect these doors together by a mechanical movement working upon the principle of lazy tongs, in such manner that any motion imparted to either door causes the other door to perform a corresponding, but opposite, movement to the same extent.

My invention further relates to improvements in doors of the type above discussed, and to various mechanical parts associated with the movements of such doors.

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 figures.

Figure 1 is a fragmentary elevation showing a pair of doors provided with my improved mechanical movement, the doors being in their normal positions—that is, closed; Fig. 2 is a view somewhat similar to Fig. 1, but showing the doors as open. The doors are shown at 6, 7 and are movable toward and from each other in the same plane. These doors are suspended by aid of bolts 8 provided with heads 9, the latter being secured to movable plates 10, 11, each having a width substantially commensurate with the width of the corresponding door, as will be understood from Figs. 1

and 2. A stationary beam 12, having generally the form of an angle iron, sustains the weight of the doors and movable parts associated therewith. A hanger 13, having generally an L shape, is mounted rigidly 55 upon the stationary beam 12 and is disposed midway between the ends of the latter.

Mounted upon the hanger 13 and extending outwardly therefrom is a pin 14. A guide bar 15 is provided at its middle with an eye 14 through which the pin 14 extends, the guide bar 15 being thereby supported. A number of levers 16, 17 are crossed and pivoted together in pairs, as will be understood from Figs. 1, 2. These 65 levers thus assembled and connected constitute lazy tongs. Spaced apart at intervals along the lazy tongs are eyes 18 through which the guide bar 15 is threaded loosely, so as to support the weight of the lazy tongs. 70 The opposite ends of the lazy tongs are connected by pins 19 with the movable plates 10, 11, from which the doors are supported.

The operation of my device is as follows: A single door 6 or 7 being moved at will by 75 the operator, motion is transmitted throughout the lazy tongs from one of the pins 19 to the opposite pin 19, so that the other door makes a corresponding but opposite movement. For instance, if the door 6 be moved to the right, according to Fig. 2, the door 7 is moved to the left and to the same extent. If, therefore, either one of the doors 6, 7 be closed, the other door practically closes itself.

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

1. The combination of a pair of doors movable toward and from each other, and a stationary guide rod connected by its middle to a point between said doors, lazy-tongs connected with said doors and provided with eyes encircling said guide rod for the purpose of supporting said lazy-tongs.

2. The combination of a pair of doors movable toward and from each other, a hanger disposed at a point central in relation to said doors, a pivot pin mounted upon said hanger; a guide rod mounted upon
said pivot pin, lazy-tongs mounted centrally upon said pivot pin and extending in opposite directions therefrom toward said doors, said lazy-tongs being provided with eyes encircling said lazy-tongs.

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

FRANK J. WEBB.

Witnesses:

WALTON HARRISON,

PHILIP D. ROLLHAUS.