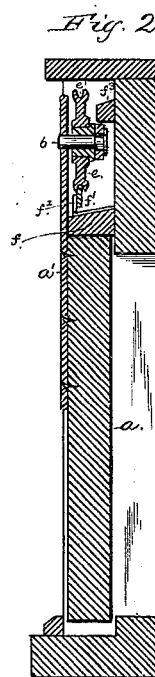
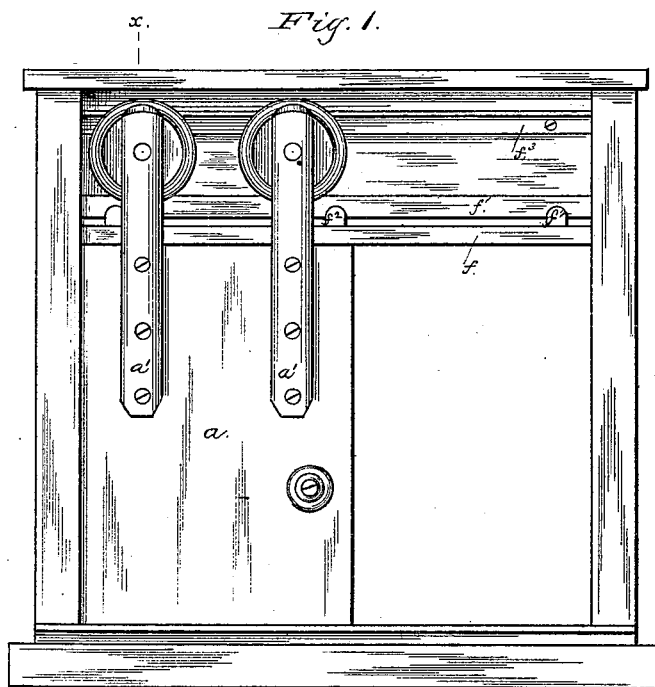
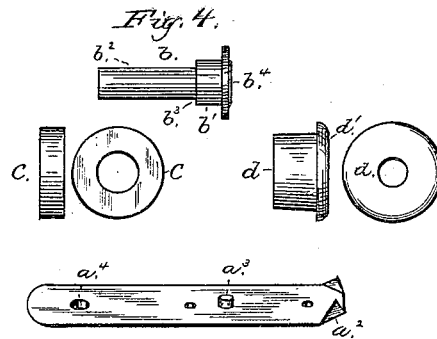
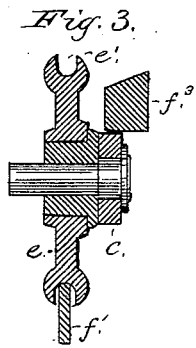


(Model.)

T. LYNCH.
DOOR HANGER.

No. 262,068.

Patented Aug. 1, 1882.



Witnesses;
J. E. Clark.
P. B. Durpin

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UNITED STATES PATENT OFFICE.

TIMOTHY LYNCH, OF DUNDEE, NEW YORK.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 262,068, dated August 1, 1882.

Application filed June 20, 1882. (Model.)

To all whom it may concern:

Be it known that I, TIMOTHY LYNCH, a citizen of the United States, residing at Dundee, in the county of Yates and State of New York, have invented certain new and useful Improvements in Door-Hangers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention has relation to improvements in door-hangers; and it has for its object a hanger that will hold the door firmly in position and prevent it being blown or jarred from its track; and it consists essentially in a hanger-axle having the supporting-roller near one end arranged to rest on a suitable track, and a supplemental roller arranged on the opposite end of axle, and arranged to bear against under side of a beam provided for the purpose, all combined, arranged, and operating as will be hereinafter more fully described.

In the drawings, Figure 1 is a front elevation of a door having my hanger attached. Figure 2 is a section on line *x x*, Fig. 1. Fig. 3 is a detached section, and Fig. 4 shows some of the parts in detail.

a represents the door, and *a'* the iron supporting the axle of the roller. This iron is constructed with the lugs or pins *a²* at its bottom, and the pin *a³*, fixed near its center. These lugs project toward and into the door when the iron is secured thereto, as shown. This relieves the screws or bolts by which the iron is secured to the door of considerable strain. I secure the iron to the door so that a portion extends above the door sufficiently far to permit the roller, hereinafter described, to be secured above the door. At proper position above the door I cut opening *a⁴* in the iron to receive end of axle, as shown.

b is the axle, formed with the portions *b¹* *b²* at each end, the portion *b¹* being of a larger diameter than portion *b²*, and the junction of the two forms a shoulder, *b³*, against which abuts the sleeve, hereinafter described. On the outer end of the axle, or the end of the por-

tion *b¹*, I fix a disk, *b⁴*, to secure the roller placed on the said portion, as will be described.

c represents the roller, journaled on the portion *b¹* of axle, and arranged to bear on the under side of a beam, provided as shown in Figs. 2 and 3.

d represents a sleeve journaled on the portion *b²* of axle, and abutting against the shoulder *b³*, formed on the axle *b* and clear of the roller *c*. On one end of this sleeve I form the annular flange *d'*. From flange *d'* this sleeve is slightly tapered, as shown. In placing this sleeve on the axle I place the end with flange on first, so it will be the outer end and prevent the supporting-roller, hereinafter described, from slipping off sleeve *d* against the roller *c*.

e represents the supporting-roller. Its eye is properly tapered to correspond with taper on sleeve *d*, and it is journaled on the said sleeve and held between the flange *d'* and the iron *a'*, when the axle is secured to said iron, as will be described. In the periphery of the roller I cut a groove, *e'*, to fit track, hereinafter described.

f represents a beam properly secured to the barn, and adapted to carry the track *f'*, as shown. The upper side of this beam is beveled outwardly, as shown, to carry the water over the door in time of rain.

f' represents the track, properly supported on brackets *f²*, extended up from beam *f*, with space between its under side and the said beam to permit water to flow off, and it is adapted to receive the supporting-roller *e*, as shown.

f³ represents a rail secured in proper position over and so that the upper periphery of the roller *c* will bear and roll against its under side, as shown. The upper side of this rail is beveled, as shown, so as to convey the water therefrom onto the beam *f*.

In practice I secure two or three hangers to the door, as shown. The beam *f* is arranged close down over the door, and prevents the latter from being jolted upwardly and off the track.

Great difficulty is experienced in the use of rolling doors from their liability to be blown or jarred from the track, and thus get out of order; and my invention is designed to obviate this difficulty. Also, the beam and rail are constructed with their upper faces beveled

to carry off water in time of rain, keeping the wood free from rot or decay, as well as the track from rust, the track being elevated by means of the brackets, as described.

5 In the operation of my invention the irons are secured to the door in the manner shown, or in any other manner desired, and the axle, with wheels *c* *e* and sleeve *d*, is secured thereto, as shown. The door and hanger are then placed
10 in position, with the wheel *e* on the track *f'* and the wheel *c* bearing against under side of the rail *f*³. The door, being thus braced beyond the track *f'*, is prevented from being blown or jarred from the track by the counter-
15 bracing between the rollers, arranged as described, bearing on track *f'* and under the rail *f*³. The wheel *c* serves not only as a preventive to the wheel *e* getting off the track, but also to guide it while on the track and give to
20 it a steadier movement.

This hanger may be used on any other track with good success, and where so desired the wheel *c* may be dispensed with and a sliding bearing-piece substituted therefor. I prefer,
25 however, the construction shown and described.

The wheel *c* and the sleeve *d* are preferably made of chilled iron. This reduces the friction, and also renders the bearings less liable to wear.

30 Ordinarily wheels used in door-hangers are

cast whole and of soft iron, and then the hole drilled out. I obviate this by chilling, as aforesaid, and render them more durable.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, 35 is—

1. The combination, substantially as described, of the axle *b*, rollers *c* *e*, track *f'*, and rail *f*³, the said rollers being both journaled on the said axle, and arranged the one on the 40 track and the other under and bearing against a rail secured above the track, substantially as and for the purposes set forth.

2. The combination, substantially as described, of the axle *b*, having portions *b'* *b*² 45 and the intermediate shoulder, *b*³, the roller *c*, journaled on portion *b'*, the sleeve *d*, provided with flange *d'*, and journaled on portion *b*² and bearing up against shoulder *b*³, the roller *e*, journaled on sleeve *d*, and the irons *a'*, sub- 50 stantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

TIMOTHY ^{his} + LYNCH.
mark.

Witnesses:

LUTHER M. HAIN,
JESSE PADDOCK.