

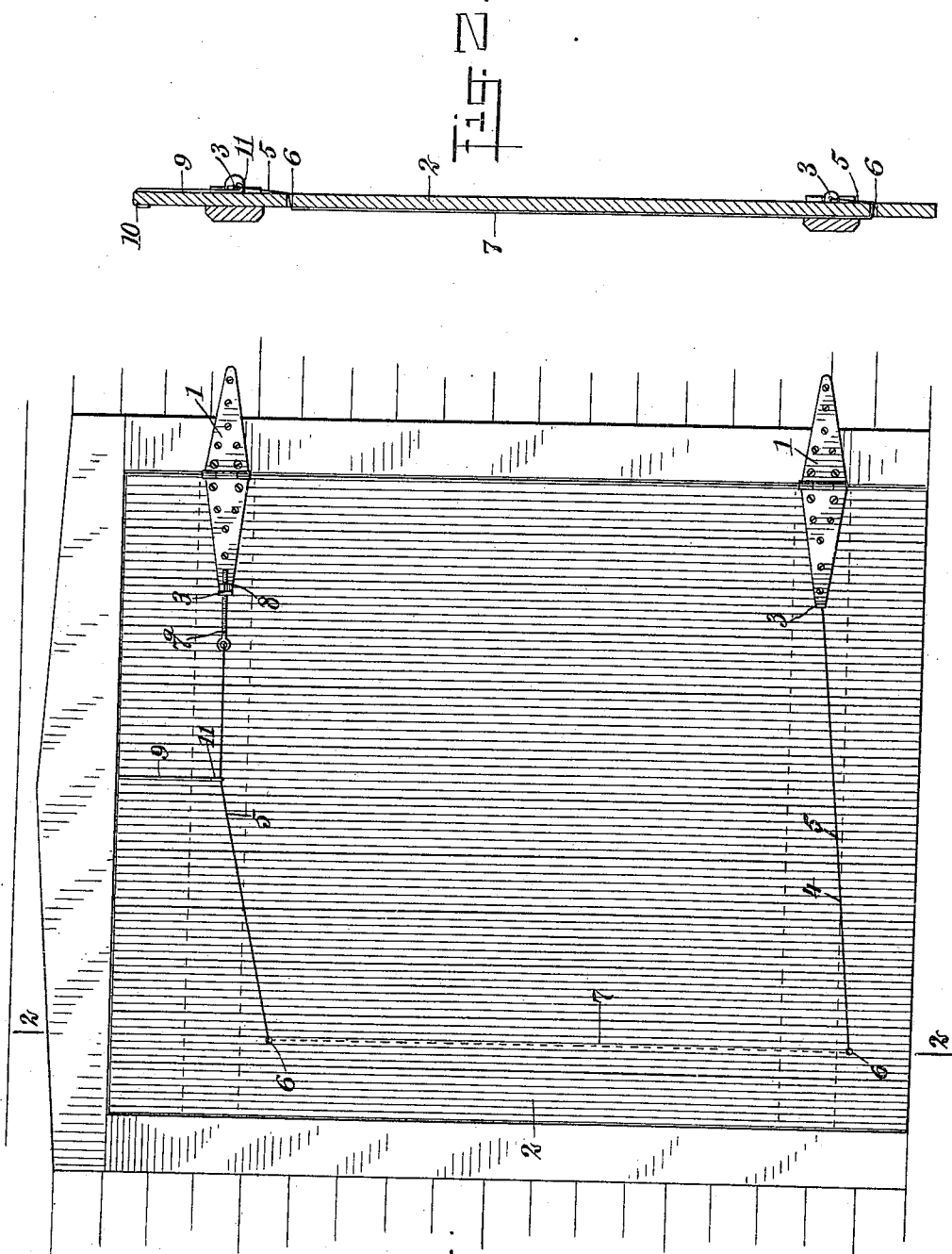
M. LOGAN.

DOOR STAY.

APPLICATION FILED NOV. 24, 1908.

952,705.

Patented Mar. 22, 1910.



WITNESSES

[Signature]
[Signature]

Fig. 1

INVENTOR

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BY *[Signature]*
ATTORNEYS

UNITED STATES PATENT OFFICE.

MARSHALL LOGAN, OF PLYMOUTH, INDIANA.

DOOR-STAY.

952,705.

Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed November 24, 1908. Serial No. 464,213.

To all whom it may concern:

Be it known that I, MARSHALL LOGAN, a citizen of the United States, and a resident of Plymouth, in the county of Marshall and State of Indiana, have invented a new and Improved Door-Stay, of which the following is a full, clear, and exact description.

This invention relates to door stays, and more particularly to such as are adapted to be used on gates, screen doors or the like whereby the doors are braced, to insure their being evenly supported in a normal condition.

The object of the invention is to provide a device of the class described, simple and efficient in construction and inexpensive to manufacture, which will prevent a door from sagging, and which will always permit it to swing freely while being opened or closed.

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 both views.

Figure 1 is a front elevation showing an embodiment of my invention applied to a door; and Fig. 2 is a longitudinal section on the line 2—2 of Fig. 1.

In the specific form shown in the drawings, I provide hinges 1 which are adapted to support a door 2 in place. In the preferred form shown in the drawings, the hinges 1 have the ends 3 of the portions which are secured to the door, outwardly disposed. Each end 3 has an opening extending therethrough. Adapted to have one of its ends secured to the extremity 3 of the lower hinge, is an elongated member 4, such as a wire or the like, consisting of two inclined stretches 5 constituting braces, and a further member or brace 7 extending longitudinally of the door. The other extremity of the flexible member 4 from that which is secured to the lower hinge, is attached to an eye bolt 7^a, the latter extending through the opening of the end 3 of the upper hinge, where it is adjustably secured in place by means of a nut 8.

As shown in the drawings, the stretches 5 pass through openings 6 in the door so that the longitudinal member 7 is located on the opposite side of the door. I further provide a hanger 9 which has its upper end suitably formed so that it may be secured at the top of the door while its lower end

is upwardly bent to form a hook 11. The upper brace 5 passes over this hook so that the greater part of the strain on this member is transferred to the top of the door.

As described, my device is especially employed for preventing doors, gates, or the like from sagging, and includes an elongated member suitably arranged so that the tendency of the door to droop or sag near its unsupported edge is obviated. As before mentioned, the member is formed into two inclined stretches constituting braces and a further longitudinal stretch. The braces are inclined, to assist in the supporting of the door. Should the door begin to sag, the member 4 can be adjusted to increase its tension and in this way the door can be again raised to its normal position. The hanger 9 which supports the upper stretch of the member, serves to transfer a great part of the strain from the hinged portion of the door to the central part thereof, thus causing a more equal division of the strain.

It should be understood that I do not limit myself to the particular construction shown in the drawings, as others equally advantageous may be employed without departing from the spirit or the scope of the invention.

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

1. The combination with the door, of a stay comprising a strand arranged in two transverse stretches and a longitudinal stretch connecting the corresponding ends of the transverse stretches, the strands at their points of merging having a running engagement with the door, the opposite ends of the transverse stretches being secured to the door, and means for regulating the tension of the stay.

2. The combination with the door, of a stay comprising two substantially transverse stretches and a longitudinal stretch connecting the corresponding ends of the transverse stretches, the strands at their points of merging having a running engagement with the door, said longitudinal stretch being on the opposite side of the door from the transverse stretches, the opposite ends of the transverse stretches being connected with the door and means for regulating the tension of the stay.

3. The combination with the door, of a stay comprising two substantially trans-

verse stretches and a longitudinal stretch connecting the corresponding ends of the transverse stretches, said longitudinal stretch being on the opposite side of the door from the transverse stretches, the strands at their points of merging having a running engagement with the door, the opposite ends of the transverse stretches being connected with the door, means for regulating the tension of the stay and a hanger connected with the door and with the upper stretch intermediate the ends thereof.

4. The combination with a door having supporting hinges, of a stay comprising upper and lower substantially transverse stretches, and a connecting stretch at one end of the transverse stretches, the strands at their points of merging having a running engagement with the door, the opposite end of the lower stretch being secured to the lower hinge, means for adjustably securing the opposite end of the upper stretch to the upper hinge.

5. The combination with a door having supporting hinges, of a stay comprising upper and lower substantially transverse

stretches, and a connecting stretch at one end of the transverse stretches, the strands at their points of merging having a running engagement with the door, the opposite end of the lower stretch being secured to the lower hinge, means for adjustably securing the opposite end of the upper stretch to the upper hinge, and a hanger connected with the top of the door and supporting the upper stretch intermediate its ends.

6. The combination with a door of a stay comprising a substantially transverse stretch and a substantially vertical stretch connected with one end of the transverse stretch and with the door, the strands at their points of merging having a running engagement with the door, and means for regulating the tension of the stay.

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

MARSHALL LOGAN.

Witnesses:

HARLEY A. LOGAN,
GRACE L. BERLIN.