

E. HANSON.
DOOR STAY.

APPLICATION FILED AUG. 17, 1911. RENEWED JAN. 23, 1913.

1,055,167.

Patented Mar. 4, 1913.

Fig. 1.

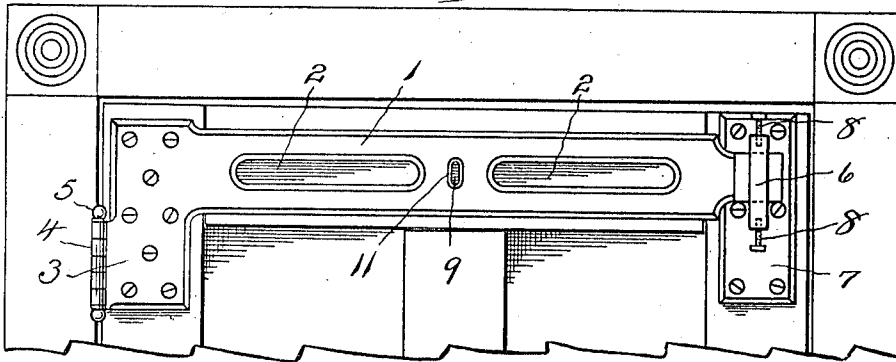


Fig. 2.

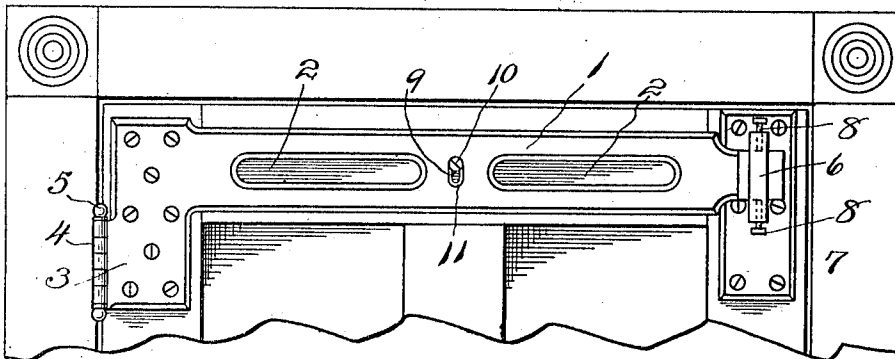


Fig. 3.

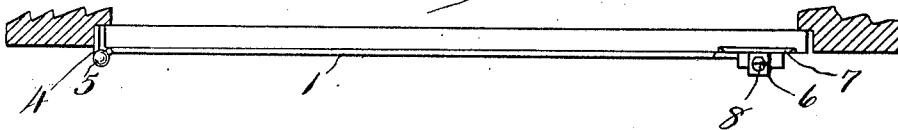
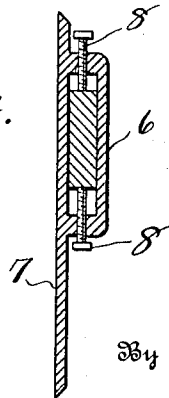


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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DOOR-STAY.

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Patented Mar. 4, 1913.

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To all whom it may concern:

Be it known that I, EMBRIK HANSON, a citizen of the United States, residing at Fairfax, in the county of Renville and State of Minnesota, have invented certain new and useful Improvements in Door-Stays; 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 relates to improvements in appliances, especially designed for staying doors, or preventing their sagging.

The invention has for its object to accomplish this result in a simple, inexpensive and effective manner, and with facility and expedition.

A further object of the invention is to provide for restoring the parts or members of the door to positions of alinement in event of the shrinkage thereof.

A still further object of the invention is to provide a combined hinge and stay of the character indicated or forming a leaf or member of the hinge and the stay integrally or in one and the same casting.

Additional objects and advantages of the invention will appear with the further disclosure of the same.

The invention consists of the instrumentalities and features substantially as hereinafter fully disclosed and defined by the appended claim.

In the accompanying drawing, illustrating the preferred embodiment of my invention wherein it will be understood various changes may be made in the details and arrangement of the parts without departing from the spirit of my invention, Figure 1 is a fragmentary view of a door with the invention applied thereto, the parts or members of the door being shown as somewhat out of alinement and central screw removed. Fig. 2 is a like view of said parts showing the same as in proper alinement. Fig. 3 is a horizontal section produced just above the door and viewing downwardly, and Fig. 4 is a broken vertical section taken through the truing or adjusting screws.

In carrying out my invention, I provide a plate-member or casting 1 preferably provided with elongated openings 2 or skeleton-

fashion like, obviously for lightness and yet not detracting from strength or durability. Said plate or casing, also preferably of the general outline disclosed and adapted to be applied to a door or closure up on its inner or outer surface along the upper portion thereof, has one end formed with a downward extension 3, which end and extension are adapted to be secured or fastened to a stile of the door at the hinge-edge of the latter by the use of screws or otherwise. Although not necessary for the practice of my invention as to its fundamentals I have in the present instance preferably shown the casting or member 1 adapted to form a leaf or member of the upper hinge 4 of the door, the extension 3 having a longitudinal or vertical edge thereof forming a knuckle joint connection through the usual pintle with the other hinge member or leaf as clearly disclosed by Figs. 1, 2 and 3. Opposite the other end of the plate or casing 1, and adapted to receive it is a keeper or bracket 6 formed integral with a base-plate 7 suitably secured to a stile of the door, which keeper however, if of a greater vertical dimension than that of said end of the member for the requisite adjustment of the latter therein. The differentiation in the vertical dimensions of the keeper or bracket 6 and the end of the plate or casting 1 is preferably effected by reducing said end for the purpose indicated, as seen from Figs. 1 and 2. The keeper or bracket 6 is provided with set or adjusting screws 8 in its upper and lower portions for engaging the corresponding edges or surfaces of the stay-member 1 within said keeper as seen more particularly in Fig. 4.

Centrally in the staying member 1 is a vertical slot 9 receiving an adjusting screw 10 adapted to enter and be screwed thereinto, and with its head adapted to engage or bear upon a slightly raised bead-like edge 11 around the slot as seen in Figs. 1 and 2 for aiding the holding of the staying member in effective position upon the door.

It will be noted that, as the stiles of the door, which from use and shrinkage of the latter as time elapses, tend to separate, and which therefore would otherwise result in the sagging of the door by suitably manipulating or adjusting the screws 8 after relaxing the action of the screw 10, which last referred to screw is finally again tightened in position any such tendency of separation

between the stiles of the door may be counteracted, or rather the parts or stiles of the door be continuously maintained practically in initial position or alinement, thus providing against the sagging of the door or otherwise becoming unsymmetrical.

A further feature of the invention is in utilizing the staying member as a leaf or member of the upper hinge of the door as before indicated.

As predicted at the outlet, the aforesaid purposes are carried out in a simple, inexpensive and effective manner and with facility.

It will be appreciated that my invention is adapted for application to doors, particularly after having been in use and need truing or alinement, as well as it may be applied to doors when first put up.

Having thus fully described the invention,

what I claim as new and desire to secure by Letters Patent of the United States is:—

A device of the character described, including a staying member having a vertical slot therein and adapted to be secured to the panel of a door, a set or holding screw projecting from the door and received by said slot, a keeper applied to a distant panel of said door, and adjusting means for one end of said staying member within said keeper the opposite end of said staying member forming a member or leaf of the upper door hinge.

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

EMBRIK HANSON.

Witnesses:

A. U. HAMRUM,

A. V. RIEKE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."