

No. 790,921.

PATENTED MAY 30, 1905.

J. T. ROE.
DOOR STOP.

APPLICATION FILED MAY 17, 1904.

Fig. 2.

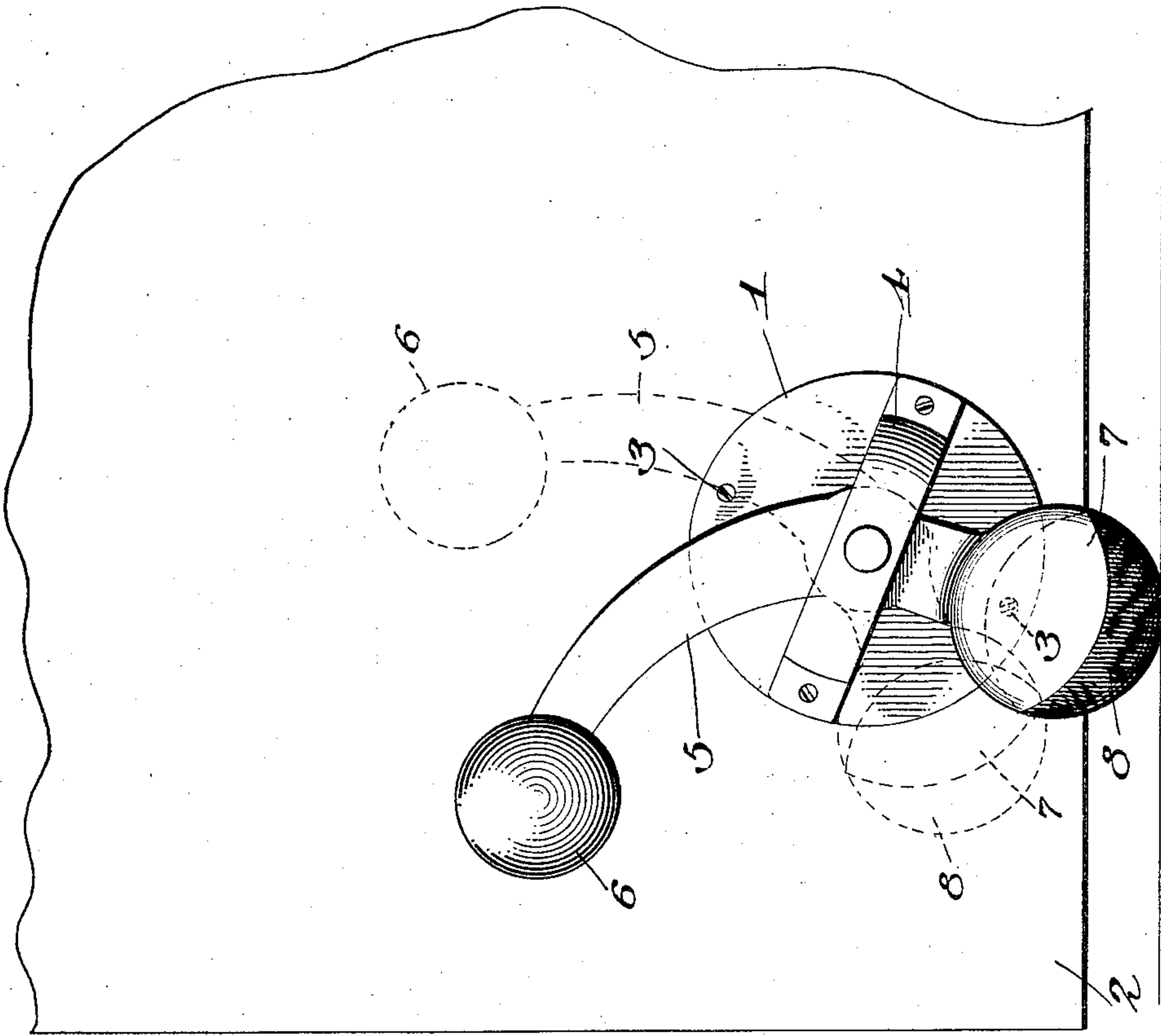
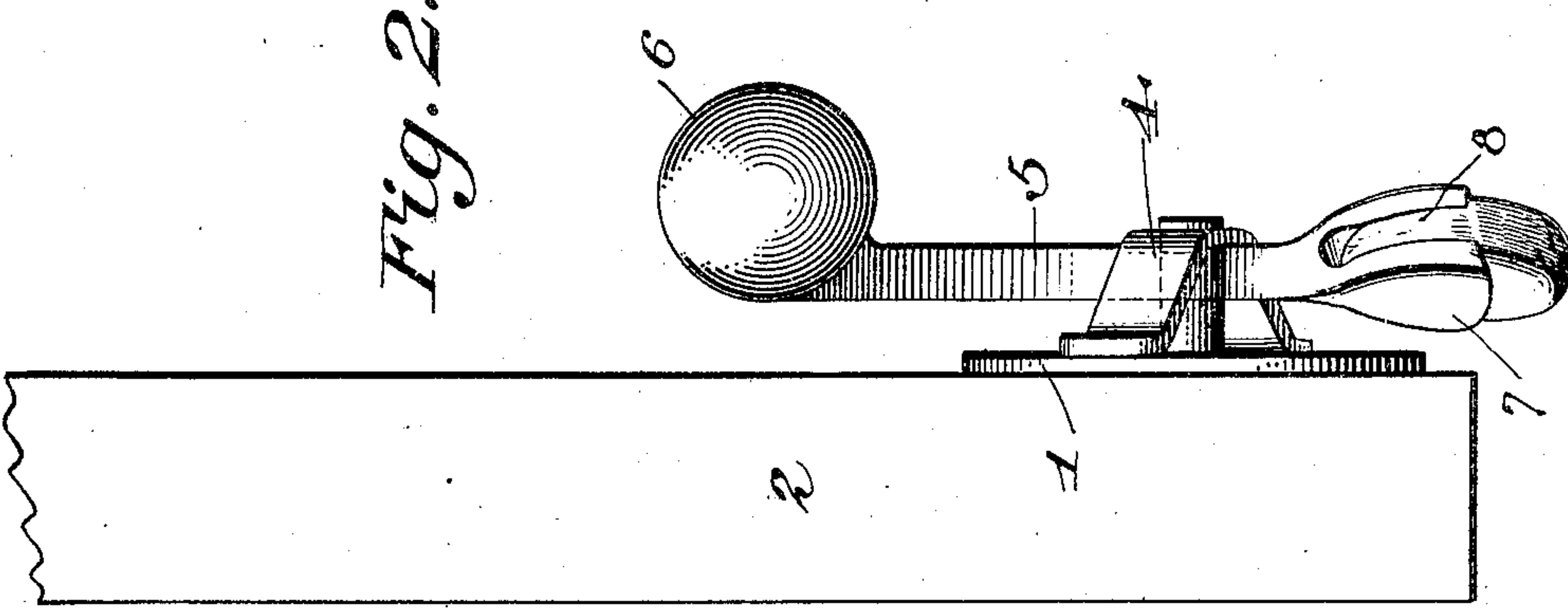


Fig. 1.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN TAYLOR ROE, OF EL PASO, TEXAS.

DOOR-STOP.

SPECIFICATION forming part of Letters Patent No. 790,921, dated May 30, 1905.

Application filed May 17, 1904. Serial No. 208,454.

To all whom it may concern:

Be it known that I, JOHN TAYLOR ROE, a citizen of the United States, residing at El Paso, in the county of El Paso and State of Texas, have invented a new and useful Door-Stop, of which the following is a specification.

This invention relates to door-stops of that class which are attached to doors for the purpose of retaining them in an open position, so as to prevent them from being blown shut or slammed from various causes.

One object of the invention is to simplify and to improve the construction of this class of devices.

Another object is to provide a device of this class which shall be automatically thrown into engaging position when the door to which it is attached is violently moved into closed position.

Still another object is to provide an improved construction whereby the tenacity of the grip of the door-stop shall be increased as the door moves in the direction of its closed position.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of embodiment of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that the right is reserved to any changes, alterations, and modifications to which recourse may be had within the scope of the invention and without departing from the spirit or sacrificing the efficiency of the same.

In said drawings, Figure 1 is a front elevation showing the improved device applied to a door and in position to secure the latter.

Fig. 2 is a side elevation.

Corresponding parts in both figures are indicated by like characters of reference.

The improved device includes a base-plate 1, adapted to be secured in position near the lower edge of a door 2 by means of screws 3

or other suitable fastening devices. Suitably secured to the base 1 is a transversely-disposed clip or strap 4, between which and the base-plate is pivotally mounted a curved arm or lever 5, carrying at its upper end an enlargement or weight 6. The lower end of the curved arm or lever 5 terminates in a pair of flanged jaws 7, between which is inserted a cushion 8, of rubber or other suitable material. This cushion is firmly gripped between the jaws 7 of the lever 5 and is thus held securely against rotation.

The shape and dimensions of the various parts of the device are such that when the curved arm or lever is thrown to the position indicated by dotted lines in Fig. 1, with its upper end away from the edge of the door, the weighted upper end of said lever will be disposed at the side of the fulcrum of the lever which is distant from the edge of the door, while the cushion carried by the lower end of the lever 5 will be elevated from the floor, preferably above the lower edge of the door, and will be retained in this position by the weighted arm of the lever which is supported by the clip 4. By moving the weighted arm of the lever 5 in the direction of the edge of the door, as seen in full lines in Fig. 1, the cushion carried by the opposite end of said lever will be depressed into contact and frictional engagement with the floor and will thereby prevent the accidental closing of the door.

As will be seen by reference to Fig. 2 of the drawings, the jaws 7 at the lower end of the arm or lever 5 are twisted to an oblique position with relation to the fulcrum of the lever, and the engaging surface of the friction-cushion will thus be presented in an oblique or tangential position with relation to the arc traversed by the device when the door is in the act of closing. By this construction the tenacity of the grip of the friction-cushion against the floor will be greatly increased, and the efficiency of the device will be increased proportionally.

The improved device may be operated manually or by the foot of the operator to throw the friction-cushion into floor-engaging or non-engaging position; but when a

door equipped with the improved device is left standing open with the device in non-engaging position and said door should be quickly flung shut, either by the wind or
5 from any other cause, the upper weighted end of the lever 5 will by the centrifugal action thus set up be moved outward in the direction of the edge of the door, thus forcing the cushion carried at the lower end of said lever
10 into active frictional engagement with the floor. In order that this operation may take place with certainty and effectiveness, it is obvious that the device when in the normal inactive position (indicated in dotted lines
15 in Fig. 1) should be in a state of unstable equilibrium, the weight 6 being at rest slightly to one side of the axis of the arm of lever 5. From this position the said arm of lever will be readily displaced when the door is moved
20 into a shut position with more than ordinary force, and the device will thus be automatically thrown into floor-engaging position.

Having thus described the invention, what

I claim, and desire to secure by Letters Patent, is—

1. In a door-stop, a floor-engaging member pivotally connected with a door and capable of being thrown into floor-engaging position by centrifugal force when the door is flung shut, and means for supporting said device
25 in a normal inactive position in a state of unstable equilibrium. 30

2. In a door-stop, a curved pivoted arm or lever, weighted at its upper end and terminating at its lower end in jaws, disposed obliquely
35 with relation to the fulcrum of the lever, and a floor-engaging cushion, clamped securely between said jaws and having a curved floor-engaging surface.

In testimony that I claim the foregoing as
40 my own I have hereto affixed my signature in the presence of two witnesses.

JOHN TAYLOR ROE.

Witnesses:

ELLA L. ROE,

Mrs. R. R. SMITH.