No. 679,400. Patented July 30, 1901.

S. S. SMITH.

DOOR STOP AND HOLDER.

(Application filed Feb. 19, 1900.)

(No Model.)

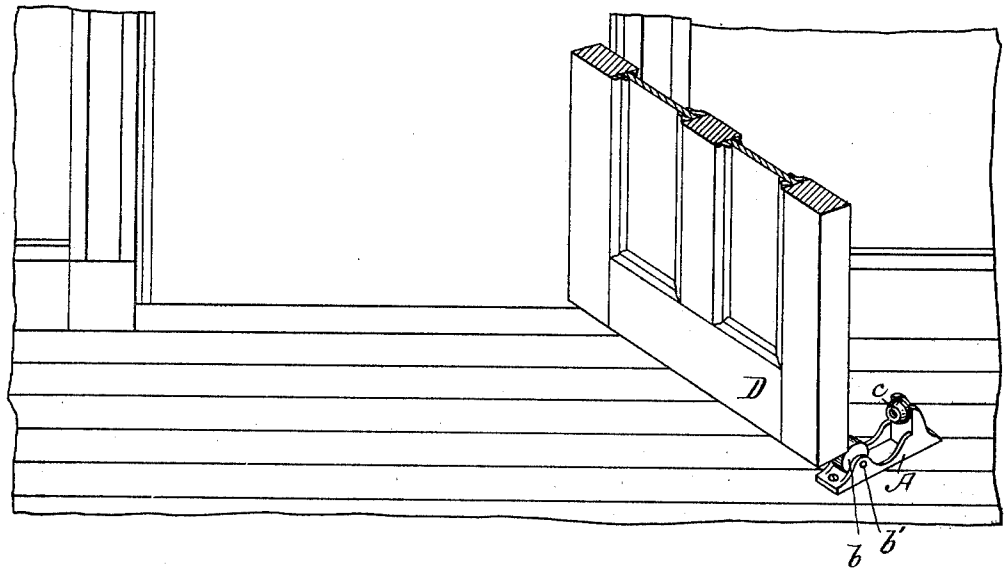


Fig. 1.

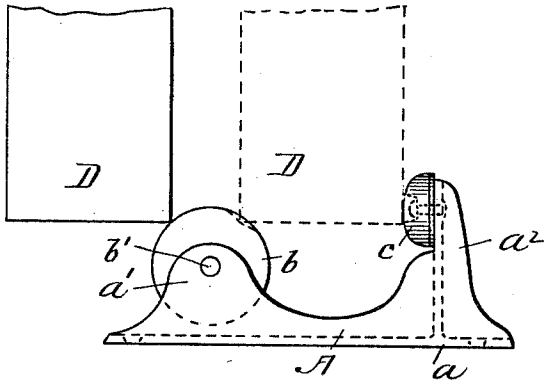


Fig. 2.

WITNESSES

E. A. Guild

M. C. Flaherty

INVENTOR

Sidney S. Smith

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

SIDNEY S. SMITH, OF DENMARK, MAINE.

DOOR STOP AND HOLDER.

SPECIFICATION forming part of Letters Patent No. 679,400, dated July 30, 1901.

Application filed February 19, 1900. Serial No. 5,689. (No model.)

To all whom it may concern:

Be it known that I, SIDNEY S. SMITH, a citizen of the United States, residing at Denmark, in the county of Oxford and State of Maine, have invented a new and useful Improvement in Door Stops and Holders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

My invention consists in a device which is attached to the floor behind a door and is intended to engage the door and hold it so that it will not close.

My device is an improvement upon devices of this class heretofore made so far as I know, being constructed of one piece and serving both as a door stop and also a holder, being also noiseless.

My invention will be understood by reference to the drawings, in which—

Figure 1 is a perspective of a device embodying my invention, showing its method of use; and Fig. 2 is a side view thereof.

A is a casting consisting of a bed-piece a, from which project upward two ears a' at one end and at the other end a back-stop a^2. Between the ears a' is mounted a roller b upon the pin b', upon which the roller may turn freely. This roller is preferably made entirely of rubber, although it may have a hard core and a rubber periphery, the intention being that the roller shall be sufficiently elastic to allow the bottom of the door to strike it and perhaps ride onto or over it, thus not marking the door. Upon the back-stop a^2 is preferably mounted a rubber button c, thus forming a buffer against which the door may strike should it pass over the roller b.

In Fig. 1 I have shown one method of using this device, D being the door. The device is firmly attached to the floor, and the door when it is opened will strike the roller and perhaps ride up upon it, in which case the friction between the top of the roller and the door will be sufficient to hold the door in place; but should the friction be not quite sufficient the door will perhaps push over the roller and bring up against the buffer, in which case it will be held between the button c on the one side and the roller b on the other. For the best results I prefer that the height of the axis of the roller above the floor shall be slightly less than the distance between the floor and the under side of the door, so that the door will strike the roller at some point on its periphery above its axis. It is also desirable that the size of the device used in any given case be proportioned to the thickness of the door, the distance from the face of the button c to the rear of the upper part of the roller b being substantially the thickness of the door with which the device is to be used.

It is evident that the back-stop a^2 and its button c, forming the buffer, are not essential to this device, although very desirable to prevent the door from striking the wall should it pass over the roller.

What I claim as my invention is—

1. The door-stop above described consisting of a rigid support, flat on its under side and adapted to rest upon and be attached to the floor, and carrying a yielding roller adapted to engage with the under surface of the door, said roller being made of rubber or the like and adapted by its elasticity to yield when engaged by the door and thereby hold the door by frictional contact therewith and without raising the door when so engaged.

2. The improved door stop and holder above described consisting of a base-plate having an elastic roller mounted upon rigid supports at one end thereof, and a buffer at its other end, said roller and said buffer being mounted in fixed relation to each other and said roller being adapted to yield by reason of its elasticity upon its engagement with the door, as and for the purposes described.

SIDNEY S. SMITH.

Witnesses:
GEORGE O. G. COALE,
J. M. DOLAN.