

E. H. BARTON.
DOOR HOLDER.
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1,054,386.

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Fig. 1.

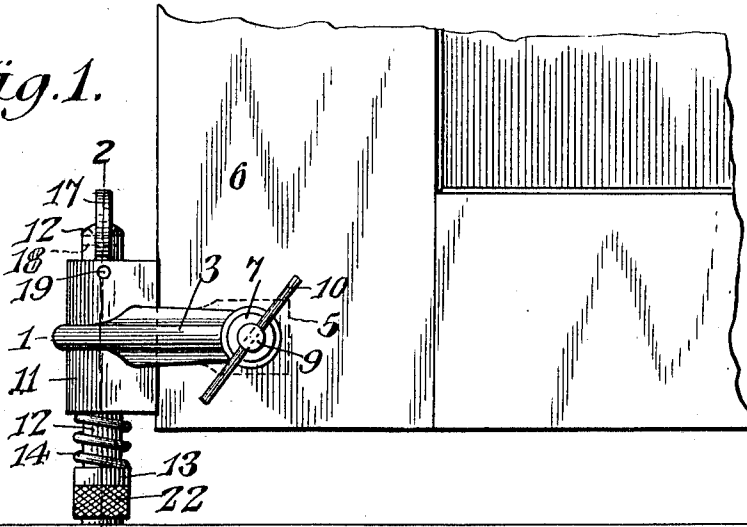


Fig. 2.

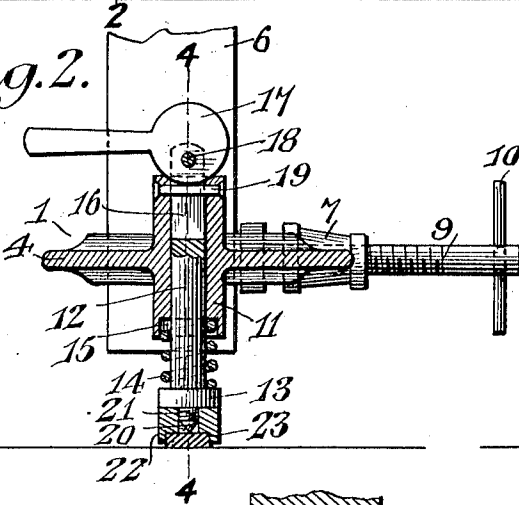


Fig. 4.

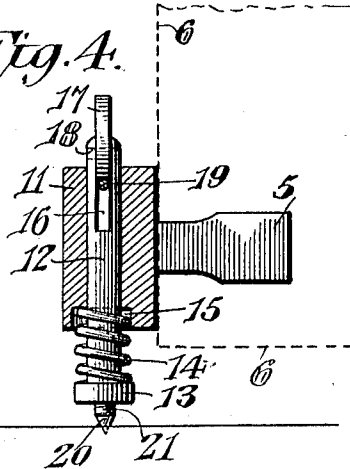
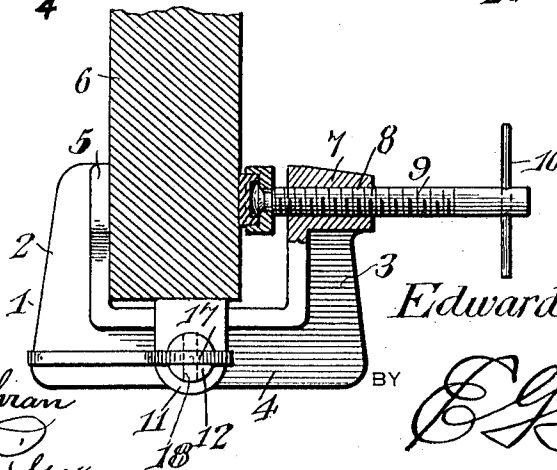


Fig. 3.



WITNESSES

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DOOR-HOLDER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWARD H. BARTON, a citizen of the United States, residing at Sprague, in the county of Lincoln and State of Washington, have invented a new and useful Door-Holder, of which the following is a specification.

The invention relates to a door holder.

The object of the present invention is to provide for the use of carpenters and other mechanics a door holding clamp of simple and inexpensive construction, adapted to be readily applied to the lower portion of a door, and capable of firmly engaging the floor and of holding the door at any angle while the same is being mortised for a lock, or a lock is being applied thereto or repaired, or the door otherwise operated on.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:—Figure 1 is a side elevation of a door holding clamp, constructed in accordance with this invention, and shown applied to a door. Fig. 2 is a vertical sectional view on the line 2—2 of Fig. 1. Fig. 3 is a plan view partly in section. Fig. 4 is a vertical sectional view on the line 4—4 of Fig. 2, the rubber tip cap being removed.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

In the accompanying drawing in which is illustrated the preferred embodiment of the invention, 1 designates the frame or body of the clamp of approximately U-shape, and composed of spaced arms 2 and 3 and a horizontal connecting portion 4. The arm 2 is provided at its inner engaging face with a fixed jaw 5, located at the end of the arm and adapted to engage a door 6 at one face thereof. The other arm 3 is provided at its end with an enlargement 7, having a threaded opening 8 for the reception of a clamping screw 9, which is equipped with a swiveled rubber tipped cap, adapted to engage the door 6 at the opposite face thereof, as clearly illustrated in Fig. 3 of the drawing. The

screw is provided at its outer end with a suitable operating handle 10, and it enables the clamp to be quickly applied to and readily removed from the door.

The frame or body of the clamp, which is arranged in a horizontal plane, is provided at the center of the connecting portion 4 with a vertical casing 11, extending above and below the horizontal frame and having in its front or outer portion a vertical opening receiving a vertically movable plunger 12. The vertical casing, which is located at an intermediate point between the arms 2 and 3, also has a solid inner portion which projects inwardly from the inner edge of the horizontal connecting portion 4, as clearly shown in Fig. 3 of the drawing, and it presents a flat inner face to the edge of the door and affords a firm bearing for the clamp to prevent the same from twisting or wobbling on the door. The plunger is provided adjacent to its lower end with a collar 13, and a coiled spring 14, which is mounted on the plunger, is interposed between the collar and the lower end of the casing, which has a counter-bore or recess 15 in its lower end to receive the upper end of the coiled spring.

The upper portion of the plunger is provided with a slot or bifurcation 16, in which is pivoted a cam lever 17 by a pin or rivet 18. The cam lever 17 is provided with a circular head, and the pin or rivet 18 is eccentrically arranged with relation to the head of the lever. The head of the lever engages the upper end of the vertical casing, and the lever is adapted to be oscillated to compress the spring and raise the plunger and also to release the spring and permit the latter to force the plunger downwardly into engagement with the floor. A horizontal pin or rivet 19, which pierces the upper end of the casing, also passes through the slot or bifurcation of the plunger for preventing rotary movement thereof.

The plunger is provided at its lower end with a pointed spur or projection 20, having screw threads 21 above the point and adapted to receive a rubber tip cap 22. The cap 22, which is interiorly threaded to screw on the lower end of the plunger, is provided at the bottom with a counter-bore or recess 23 in which a disk of rubber, or other suitable material is secured.

The clamp is adapted to firmly and positively grip the free edge of the door at the lower corner thereof, and the spring is of

sufficient strength to force the plunger tightly against the floor; and when necessary the pointed projection or spur may be used to prevent a door from slipping while being operated on by a carpenter or other mechanic. After the work is completed the clamp may be readily detached from the door.

What is claimed is:—

- 10 1. A door holding clamp comprising an approximately U-shaped horizontal frame composed of spaced sides and a connecting portion and provided at one of its arms with a fixed jaw for engaging one of the
15 side faces of a door, the other arm being provided opposite said jaw with a threaded opening, said frame being also provided at its horizontal connecting portion with an integral upright casing arranged at right
20 angles to the plane of the frame and extending above and below the same and provided with a solid inner portion having a flat inner vertical bearing face arranged to bear against the edge of the door to steady
25 the clamp thereon, a clamping screw mounted in the threaded opening and coacting with the fixed jaw, a vertical plunger guided in the casing and provided at its lower ends with means for engaging the
30 floor, a coiled spring for forcing the plunger into engagement with the floor, and operating means connected with the plunger for moving the same upwardly against the action of the spring.
- 35 2. A door holding clamp comprising an approximately U-shaped horizontal frame provided at one of its arms with a fixed vertical jaw for engaging one of the faces of a door, the other arm being provided opposite
40 the said jaw with a threaded opening, said frame being provided at an intermediate point between the arms with a casing arranged at right angles to the plane of the frame and adapted to fit against the edge
45 of the door and extending above and below the frame to steady the same, a clamping

screw mounted in the threaded opening and co-acting with the fixed jaw, a plunger mounted in the casing and provided at its upper portion with a bifurcation, a cam
50 lever pivoted in the bifurcation and engaging the casing, a pin piercing the upper end of the casing and passing through the bifurcation to prevent rotary movement of the plunger, and a spring mounted on the
55 plunger for urging the same into engagement with a floor.

3. A door holding clamp comprising an approximately U-shaped frame having a casing arranged at right angles to the frame
60 and projecting beyond the same, a clamping screw mounted on the frame for engaging the door, a plunger operating in the casing and provided at one end with a collar and having a threaded projection or spur
65 extending centrally from the collar, a spring disposed on the plunger and interposed between the collar and the casing, a lever connected with the plunger for operating the same, an interiorly threaded cap fitted on
70 the spur or projection and engaging the threads thereof and provided in its outer face with a counter-bore, and an elastic piece held within the recess or counter-bore and adapted to engage a floor.

4. A device of the class described including a plunger provided at one end with a threaded projection or spur, an interiorly threaded cap removably fitted on the spur
75 or projection and engaging the threads thereof and provided in its outer face with a counter bore, and an elastic piece held within the recess or counter bore and adapted to engage the floor.

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

EDWARD H. BARTON.

Witnesses:

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REVA L. FORDHAM.