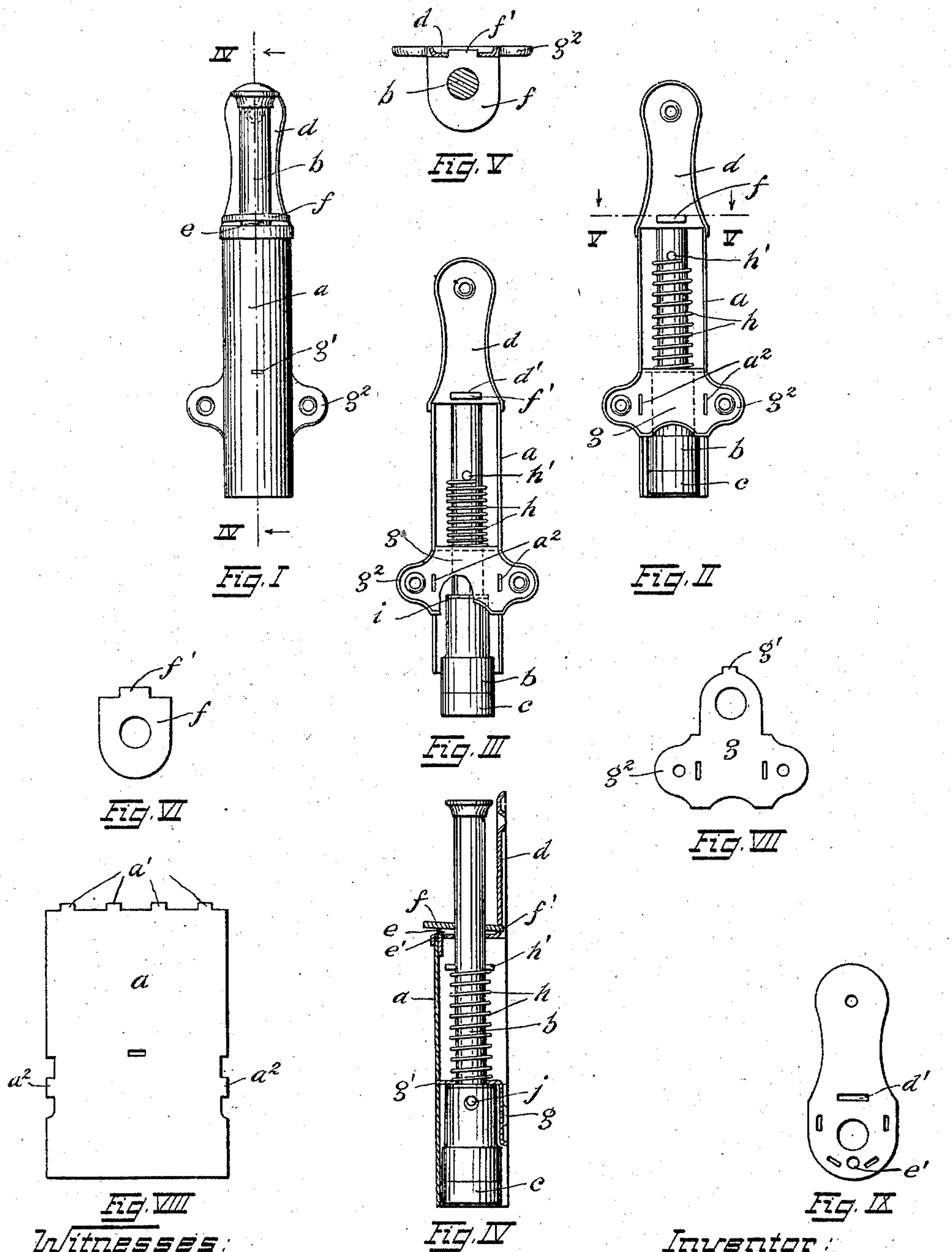


E. W. HASENPFLUG.
DOOR HOLDER.
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966,913.

Patented Aug. 9, 1910.



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UNITED STATES PATENT OFFICE.

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DOOR-HOLDER.

966,913.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EZRA W. HASENPFLUG, a citizen of the United States of America, and a resident of Geneva, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Door-Holders, of which the following is a specification.

My invention relates to improvements in door-holders, and has for its object the production of an improved device adapted to be attached to the lower portion of a door for the purpose of holding the door open in any desired position.

The object of my invention is to provide a device of this character which may be made from a small number of stamped metal parts, which device shall be not only strong and durable, but cheap in the cost of manufacture.

The preferred construction of my improved device will be readily gathered by making reference to the accompanying sheet of drawings well illustrating the same, together with several of the parts or stamped metal blanks from which the device is assembled. Referring thereto—

Figure I is a front view in elevation of my improved door-holder. Fig. II is a rear view thereof. Fig. III is a similar view partly broken away with the plunger depressed in the position for holding open the door. Fig. IV is a vertical section on line IV—IV, Fig. I. Fig. V is a transverse section on line V—V, Fig. II, showing particularly the trip-member in position. Fig. VI shows the blank forming said trip-member. Fig. VII shows the blank for forming the central support and attaching member. Fig. VIII shows the blank for forming the semi-tubular casing; and Fig. IX shows the blank for forming the cap and upper attaching member.

Throughout the several figures of the drawings, I have employed the same character of reference to indicate similar parts.

Inasmuch as the principal strain upon a device of this class is imparted through the lower portion of the plunger, I have provided in my improved construction, an integral bridge and plunger support for attaching said device near the bottom of the door, the blank for which is well shown in Fig. VII, and its position may best be gathered

by referring to Figs. I and II. Again, the trip-member instead of requiring a cast frame, is pivotally mounted within an opening or slot provided therefor in the integral cap and upper attaching member; the blank for which is illustrated in Fig. IX. These, and other features, will now be explained in detail by making reference first to the assembled device.

The semi-tubular casing *a* is shaped from the blank shown in Fig. VIII, and contains the vertically movable plunger *b* provided with a rubber foot or member *c* adapted to be forced into engagement with the floor. The integral cap and attaching member *d* is secured at the top of the casing by means of the upset lugs *a'*, said cap having an opening *e'* to accommodate the spring *e*, and a rearward slot *d'* pivotally mounting the lug *f'*, rearwardly formed upon the trip-member *f*, which encircles the upper portion of plunger *b*. An integral bridge and attaching member *g* accommodates the lower portion of the plunger stem, being attached to the casing by the upset lugs *a''* and *g'*. The compression spring *h* bears against the angularly bent portion of said member *g* at one end, and at the other end engages the pin *h'*, extending transversely through the plunger stem.

From the foregoing description, one may readily perceive the coöperative action of the several parts and appreciate the advantages of my improved device. Thus, the plunger now is normally held in its elevated position, as shown in Figs. I and II, by means of spring *h*. When the device is attached to a door, said plunger is readily depressed by the foot of the user, until the rubber member *c* engages the floor with sufficient force to hold the door open; said plunger being held in its depressed position by means of the trip-member *f* and its co-acting spring *e*. Inasmuch as the bridge *g* is secured by the laterally extending ears *g''* adjacent to the lower portion of the door, the strain imparted through the plunger is directly taken up thereby in the most advantageous position. By depressing the outer end of the trip-member *f*, the plunger may instantly be released, and the door freed through the action of spring *h*.

Preferably, a leather washer *i* is provided upon the plunger stem for deadening the

shock of the upwardly impelled plunger. A transverse pin *j* preferably unites the plunger stem with the lower portion of the plunger and its rubber foot.

5 Having now described the preferred device embodying my invention, I claim as new, and desire to secure by Letters Patent, the following:—

10 1. In a door-holder, the combination with a semi-tubular casing formed of sheet metal, of a sheet metal cap and securing member attached at the top thereof, a sheet metal member having lateral attaching lugs or ears positioned near the bottom of said casing, a vertically movable plunger within the casing, a spring against which said plunger acts, and a retaining and trip-member for the plunger, substantially as set forth.

20 2. In a door-holder, the combination with angularly-bent attaching and supporting members shaped from sheet-metal and positioned near the extremities of the device, of a vertically movable plunger directly supported within said members, a retaining and trip-device pivoted upon the upper member, 25 a casing, and a spring under tension for elevating the plunger; said lower member serving as an abutment for the spring and

for the plunger when in its elevated position, substantially as set forth. 30

3. In a device of the class described, the combination with a vertically movable plunger, of an angular support and lower attaching member, a casing, an angular cap and upper attaching member; said plunger extending through the angularly bent portions of the two attaching members, a spring, and a retaining and trip-member for the plunger, substantially as set forth. 35

4. In a door-holder, a semi-tubular casing, 40 an integral cap and upper attaching member covering the casing, a vertically movable plunger, a combined support therefor and securing member attached near the bottom of the casing, a spring upon the plunger stem acting against said support; said casing and securing members being formed of sheet metal and having upset engaging lugs, and an upper trip and retaining member, 50 substantially as set forth.

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

EZRA W. HASENPFLUG. [L. s.]

Witnesses:

MARGARET BRICK,
J. G. BROWN.