

No. 763,941.

PATENTED JUNE 28, 1904.

J. M. BUTCHER.
FLOOR VISE.

APPLICATION FILED MAR. 7, 1904.

NO MODEL.

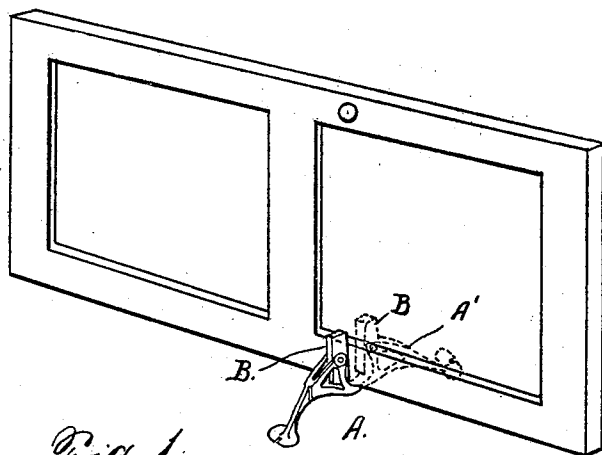


Fig. 1.

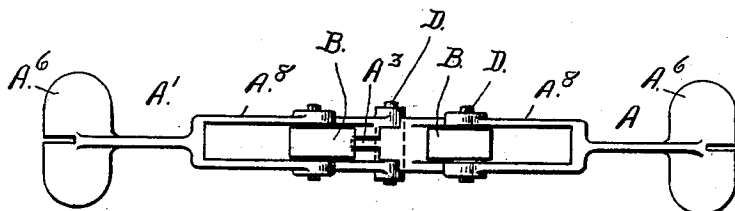


Fig. 2.

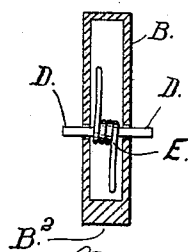


Fig. 4.

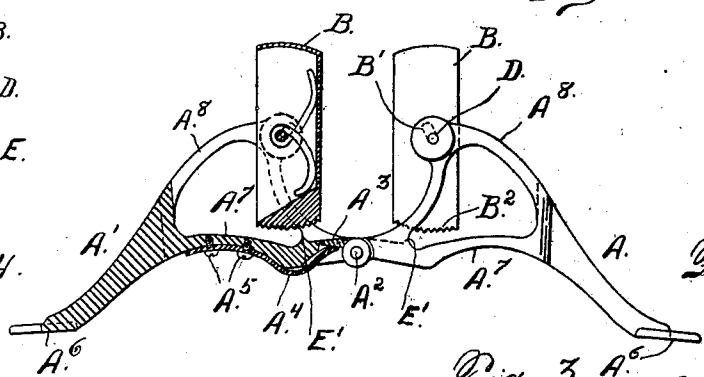


Fig. 3.

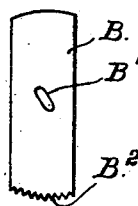


Fig. 5.

Witnesses
Otto C. Haddach.
Dena S. Nelson.

J. M. Butcher.
Inventor
By *[Signature]*
Attorney

UNITED STATES PATENT OFFICE.

JAMES M. BUTCHER, OF ST. LOUIS, MISSOURI, ASSIGNOR OF TWO-THIRDS TO GEORGE BANTA, OF MENASHA, WISCONSIN, AND CHARLES H. STREET, OF CHICAGO, ILLINOIS.

FLOOR-VISE.

SPECIFICATION forming part of Letters Patent No. 763,941, dated June 28, 1904.

Application filed March 7, 1904. Serial No. 196,823. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. BUTCHER, a citizen of the United States of America, residing in the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Floor-Vises; 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 of reference marked thereon, which form a part of this specification.

My invention relates to improvements in floor-vises, my object being to provide a device of this class adapted to hold doors, window-sash, and other like articles in place when resting upon one edge for finishing or other purposes.

My further object is to provide a device of this class which shall be simple in construction, economical in cost, reliable, durable, and efficient in use; and to these ends the invention consists of the features, arrangements, and combinations hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a perspective view of my improved device shown in connection with a door supported upon its edge. Fig. 2 is a top view of the device shown in detail. Fig. 3 is a side elevation of the same shown partly in section. Fig. 4 is a sectional view of one of the jaws of my improved device viewed at right angles to the position shown in Fig. 3. Fig. 5 is a side elevation of the same.

The same reference characters indicate the same parts in all the views.

Let A and A' designate two frame members which are pivotally connected by a pin A², which passes through ears formed on the adjacent frame members. The member A is provided adjacent the hinge-pin and above the same with a tongue A³, which passes through a counterpart slot formed in the adjacent member. This tongue A³ rests upon the inner extremity of a leaf-spring A⁴, which is made fast

to the member A' by screws A⁵ or other suitable fastening devices. The outer extremity of each member is provided with a foot A⁶, upon which the device is supported when not in use. In this event the hinge-pin or pivot A² is supported a considerable distance above the floor or other surface upon which the device rests. This is due to the engagement of the tongue A³ with a spring A⁴. As shown in the drawings, the inner bottom portion A⁷ of each member is solid, while the upper portion A⁸ of each member is bifurcated to receive jaws B, which are mounted between the arms of the bifurcated or forked portions of the two members. These jaws B are pivotally mounted to swing on pins D, which are mounted in the inner extremities of the parts A⁸ of the two members. These pivots or hinge-pins pass through slots B' formed in the side walls of each jaw. As shown in the drawings, the jaws are hollow, being open on their rear sides. Within the hollow of each jaw is located a coil-spring E, which is coiled around the pin D, while its extremities engage the jaw on the inside and normally support it so that the pin D occupies the lower extremity of the slot B'. These slots are inclined, so that when an article, as a door, is placed between the jaws a downward pressure is applied and the jaws are caused to yieldingly grip the said article. The jaws, however, as the downward pressure is continued will force downwardly as far as the parts B' will permit. By the time this occurs the ratchet-teeth B², formed on the lower extremity of each jaw, are made to engage projections E', which lock the jaws from further downward movement and at the same time hold them in such position that their engaging or gripping edges are parallel.

From the foregoing description it is believed that the use and operation of my improved floor-vise will be understood without further explanation in detail.

Having thus described my invention, what I claim is—

1. A floor-vise composed of two frame members pivotally connected at their inner extremities and spring-supported whereby the

pivoted parts of the members are normally supported above the outer extremities of the members, and a jaw pivotally mounted upon each member, each jaw having an inclined slot and the member having a pin passing through the said slot, each jaw being hollow, and a spring being coiled around the pin upon which each member is supported, and having its extremities engaging the jaw on the inside whereby the latter is supported in the uppermost position permitted by its slot.

2. A floor-vise composed of two members pivotally connected and spring-supported at their inner extremities, and jaws respectively mounted on the said members, each jaw being hollow and having an inclined slot, pins passed through the members and the slots of the jaws, and spring-coiled around the pins and normally supporting the jaws so that the pins engage the bottoms of the slots.

3. A floor-vise composed of two members pivotally connected and spring-supported, a jaw pivotally mounted upon each member above their pivotal connection, by a pin passing through each member and an inclined slot formed in the jaw, springs supporting the jaws so that the supporting-pins normally engage their lower extremities, the lower ends of the jaws being toothed, and each frame member being provided with a projection adapted to engage the teeth of the jaws when the latter are forced downwardly, substantially as described.

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

JAMES M. BUTCHER.

Witnesses:

SOPHIE C. LEUSSLER,
A. E. LEUSSLER.