(No Model.)

E. HARROUN.

PANEL FASTENER.

No. 399,261. Patented Mar. 12, 1889.

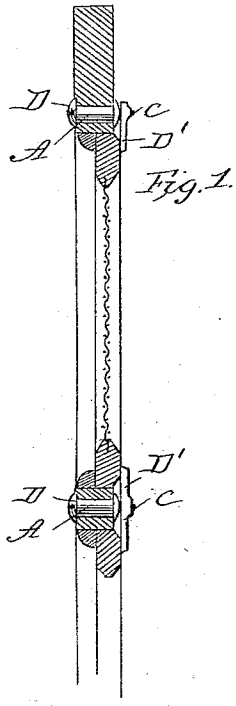


Fig. 1.

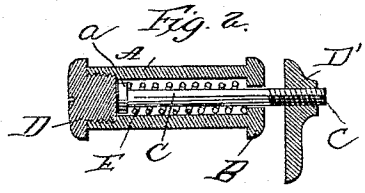


Fig. 2.

Witnesses
Walter Donaldson
Chas. L. Stuntevant.

Inventor
Edward Harroun
by Ellis Spear
Atty.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

EDWARD HARROUN, OF PRINCETON, WISCONSIN.

PANEL-FASTENER.

SPECIFICATION forming part of Letters Patent No. 399,261, dated March 12, 1889.

Application filed September 30, 1887. Serial No. 251,151. (No model.)

To all whom it may concern:

Be it known that I, EDWARD HARROUN, a citizen of the United States, residing at Princeton, in the county of Green Lake and State of Wisconsin, have invented a new and useful Panel-Fastener, of which the following is a specification.

My invention is an improved panel-fastener for use in fastening panels on doors when it is desired to convert screen-doors into storm-doors, which is done by having panels of a size suitable to cover the space occupied by the screens.

The object of my invention is to provide a device for the purpose above mentioned which shall afford a firm fastening for the panel and at the same time be almost entirely concealed so as not to be unsightly.

The invention consists of a suitable tube which passes through the door, a rod passing through the same, carrying the securing-button upon the end, and a spring within said tube for keeping said rod and button under tension.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 shows my invention applied to a door. Fig. 2 is a section of the fastener.

In the drawings, A is a tube, of any suitable material, in length sufficient to pass through a door. This tube has a cap, B, brazed upon its end, in the center of which a hole is made just large enough to permit of the passage of the rod upon which the fastening-button D′ is secured. This rod is marked C, and, as shown in Fig. 2, has one end upset to form a head, *a*, which head is larger in diameter than the opening in the cap B of the tube, and therefore the rod is prevented from falling out through said hole, and is prevented from falling out the other end of the tube by means of the cap D, which is externally threaded to engage with the internal threads, *a*, formed upon the interior of the tube A. The end of the rod C projecting through the hole in the cap B is screw-threaded to receive a button, D′, which serves to hold the panel after it has been put in position.

Within the tube A and encircling the rod C is a coiled spring, E, one end of which bears against the upset head *a* of the rod, and the other end upon the under side of the cap B, and thus exerts a pressure constantly to keep the rod within the tube.

Instead of screwing a button upon the end of the rod C, said rod may be of wire, and the end projecting beyond the end of the tube may be bent and thus act in a manner similar to the button.

Instead of using a removable cap D to close the end of the tube, I may make the upset end of the rod C serve as such.

In order to put the device into use, a hole is bored through the door large enough for the reception of the tube A, which is then inserted into place therein, together with the rod C, and the cap D screwed on, and by means of the screw and cap D and cap B the tube is kept from dropping out. The button is then placed on the projecting end of the rod and turned around until it is in proper position against the panels, and the force of the spring E will hold it firmly against said panel and prevent its slipping around.

If desired, instead of an ordinary button being used upon the end of the rod any ornamental fastening may be used; or, if desired, a double button may be used, so that when in proper position it will hold adjoining edges of two panels.

I claim as my invention—

1. A panel-fastener consisting of a tube having a cap, B, and an opening therethrough, a rod passing through said opening into said tube, a holder on the end of said rod, a spring within the tube encircling the rod having one end bearing against the inside of the cap B, and the other end in positive connection with the other end of the rod, and thus arranged to press the rod inwardly to keep the holder close to the tube and to place a yielding resistance on the same against outward movement, substantially as described.

2. A panel-fastener consisting of a tube, A, a cap, B, brazed thereto, a rod, C, passing into said tube and having an upset head, and a securing-button on said rod, a spring encircling said rod and bearing upon the head *a*, whereby said rod is kept normally pressed within the tube, and a cap, D, removably secured to the other end of the tube, all substantially as described.

Dated at Princeton, Wisconsin, September 1, A. D. 1887.

EDWARD HARROUN.

Witnesses:
R. MUELLER,
F. MUELLER,
EDWARD BUCHOLZ.