M. Judd, Sast Holder.

Patented Apr. 11. 1871.

Fig. 1.

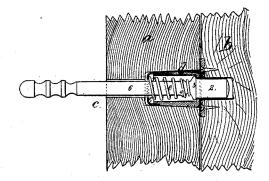


Fig. 2.



Morton Judd

Witness, Cho-St Smith Leo I wickney Lemnel M. Genell

## United States Patent Office.

## MORTON JUDD, OF NEW HAVEN, CONNECTICUT.

Letters Patent No. 113,673, dated April 11, 1871.

## IMPROVEMENT IN SASH-HOLDERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, MORTON JUDD, of the city and county of New Haven and State of Connecticut, have invented and made a certain new and useful Improvement in Spring Bolts for Windows, and the following is hereby declared to be a full and correct description of the same.

In Letters Patent granted to me June 21, 1870, No. 104,465, a spring bolt is shown in which a socket is employed setting within a hole in the mullion of the window-sash, to act as a guide for the shank of the bolt, and also to inclose the spring which sets around said shank and projects the bolt.

One end of said socket is open to allow for the insertion of the spring and bolt, and said spring acts between a collar upon the shank of the bolt and the wood at the end of the hole which receives the socket.

The difficulty with the use of a socket in the above form is that it requires care in boring the hole for the socket; for if the hole is bored too deep the space for the spring is too great and said spring may not project the bolt its full length.

My improvement is made to overcome this difficulty, so that so much care is not required in boring the hole to receive the socket, and the parts of the bolt are all held together, and not liable to become detached, misplaced, or lost.

I make use of a cast-metal socket similar to the one mentioned in said patent, with the exception that there is not any flange at its outer end, and its inner end is formed with a slightly-reduced portion to receive a sheet-metal cap, which cap forms a cover to that end of the socket and a bearing for the spring within said socket, so that the spring acts between said cap and the collar upon the bolt-shank to project the bolt, and said cap holds the parts of the bolt together.

In the drawing-

Figure 1 is a section of part of a sash and casing with my improvement applied thereto; and

Figure 2 is an elevation of the socket and its cap detached.

The bolt c is substantially the same as in aforesaid Letters Patent, being made with the head 2 to enter the casing b; a collar, 3, to prevent the bolt passing out of the socket d, and a collar, 4, between which and the collar 3 the end of the spring e is clasped, so that it cannot become detached from the shank 6 accidentally.

The socket d is of slightly-tapering form, so that it can be driven more easily into a correspondingly-shaped hole in the mullion a; and said socket is made of cast metal and can be driven into said hole.

The interior of the socket is of a size to allow the spring e to move freely therein, and the outer end of said socket is provided with a hole to guide the bolthead 2 in its movement.

The inner end of said socket is formed with a slightly-reduced portion at f to receive the edges of the sheet-metal cap g, which cap is pressed tightly upon said portion f of the socket d so as to remain thereon; and between said cap g and the collar 4 the spring e acts to project the bolt c.

I claim as my invention-

The cap g applied to the socket d, and inclosing the spring e of the bolt e, the parts being constructed as and for the purposes set forth.

Signed by me this 8th day of March, A. D. 1871.

MORTON JUDD.

Witnesses:

CHAS. H. SMITH, GEO. T. PINCKNEY.