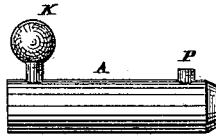
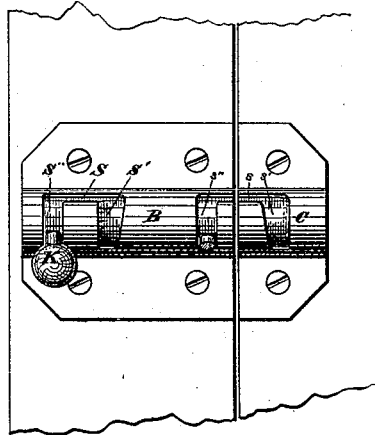


L. F. BURRELL.  
Bolt.

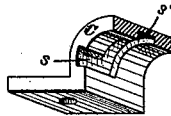
No. 212,539.

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*Fig: 1.*



*Fig: 2.*



*Fig: 3.*

WITNESSES  
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# UNITED STATES PATENT OFFICE.

LOUIS F. BURRELL, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN BOLTS.

Specification forming part of Letters Patent No. **212,539**, dated February 25, 1879; application filed November 12, 1878.

*To all whom it may concern:*

Be it known that I, LOUIS F. BURRELL, of the city of Chicago, State of Illinois, have invented certain new and useful Improvements in Sash-Fastenings; and I do hereby declare that the following is a full, clear, and exact description of the invention, 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 an adaptation of a round bolt to the meeting-rails of window-sash, to constitute a sash-fastener, and to other similar situations; and it consists in providing the bolt with a pin near its protruding end, and in providing the barrel and striker with cross-slots to receive this pin and the knob-shank, so that by rotating the bolt after it has been thrown it is made to tie or bind the two rails together through the engagement of the knob-shank and pin in said cross-slots.

In the drawings, Figure 1 is a top view of the barrel and striker with the knob retracted. Fig. 2 is a side view of the bolt provided with the pin; and Fig. 3 is a sectional view of a cast-metal striker, showing the slot for the reception of the pin, in the form of a shallow groove, in the under face thereof.

A is a round bolt, of suitable size for the purpose, of which B is the barrel and C the striker. The bolt A has the usual knob K, connected by a shank to the bolt, and is also provided with the pin P near its protruding end.

The barrel B has the longitudinal slot S, in which the knob-shank works when the bolt is thrown or retracted. Said slot has at its inner end the transverse extension S', and it may have the outer extension, S''.

The striker has the longitudinal slot s, for the entrance of the pin P when the bolt is thrown, and this slot is also provided with a transverse extension, s'.

The knob K and pin P are preferably in line on one side of the bolt, so that the slots S and s may be in line and placed as far as possible on one side of the respective parts of the bolt-case, in order to give a longer ro-

tary throw to the knob and pin in the transverse slots, as will be further explained.

If the transverse slots S' and s' be directed straight across the barrel and striker, the effect of rotating the knob-shank and pin into them will be simply to tie the meeting-rails to which the bolt is applied. It is desirable in a meeting-rail fastening, however, to provide means by which the rails may be drawn forcibly together, if apart, as well as held or clamped when together. I therefore make the inner walls of the transverse slots spoken of oblique, as shown, so that the knob-shank and pin, in being rotated into them, will bear upon said inner walls and draw the barrel and striker firmly together. The outer walls are directly transverse, making the entrance to the cross-slots broad, so that the shank and pin will enter the latter freely, whether the rails to which the bolt is applied are in contact or apart.

By locating the longitudinal slots S and s at one side, as indicated in the drawings, and extending the transverse slots S' and s' to the opposite side of the bolt-case, sufficient gain may be obtained to meet all ordinary requirements.

Obviously but one of the transverse slots need have the oblique inner wall; but the bolt works better when the gain is divided between the two, as shown.

When the case is formed of sheet metal it will be necessary to bridge the slot s in the striker to give the latter proper strength; but, if the case be cast, the slot may form a groove in the inner face of the striker, as illustrated in Fig. 3.

Provision is made for locking the bolt in its retracted position by the slot S'' and recess or slot s''. (Shown in Fig. 1.)

The bolt is preferably reduced at its protruding end, as indicated in Fig. 2, to facilitate its admission into the striker when the meeting-rails are not exactly in proper horizontal relation.

Having thus described my invention, I claim and desire to secure by Letters Patent—

The bolt A, provided with the shanked

knob K and pin P, combined with barrel B and keeper C, provided with longitudinal slots S s and transverse slots S' s', having sides inclined in opposite directions, as shown, for the purpose of drawing the barrel and keeper together when the bolt is rotated upon its axis.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

LOUIS F. BURRELL.

Witnesses:

M. E. DAYTON,  
WM. M. STANLEY.