

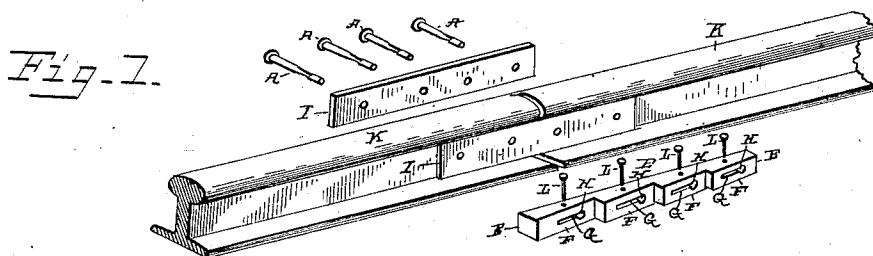
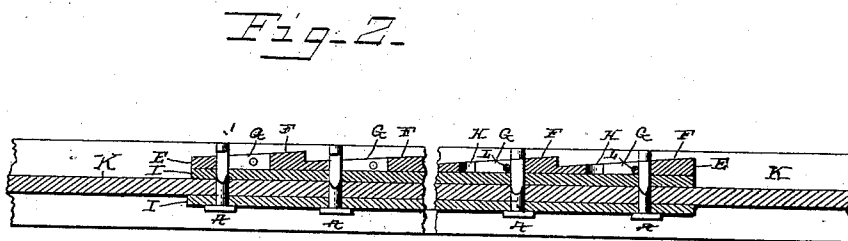
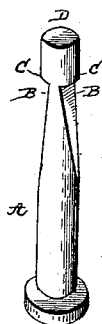
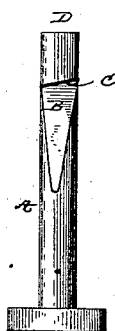
(No Model.)

W. H. BABCOCK.

BOLT LOCK,

No. 333,718.

Patented Jan. 5, 1886.



WITNESSES:

Edwin L. Jewell.

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INVENTOR

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by Frank Sheehy.
his Attorney

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UNITED STATES PATENT OFFICE.

WILLIAM H. BABCOCK, OF ALTON, IOWA, ASSIGNOR OF ONE-HALF TO
PETER GOEBLE, OF SAME PLACE.

BOLT-LOCK.

SPECIFICATION forming part of Letters Patent No. 333,718, dated January 5, 1886.

Application filed September 1, 1885. Serial No. 175,911. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BABCOCK, a citizen of the United States, residing at Alton, in the county of Sioux and State of Iowa, have invented certain new and useful Improvements in Bolt-Locks; 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 and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in bolt securers or locks, and is designed to obviate the use of nuts, to tighten or draw the bolts more expeditiously than can be done by the nuts, and so secure the bolts in place as to prevent accidental loosening, while not interfering with the removal of said bolts.

In the drawings is shown, in Figure 1, a perspective of the device as applied to a rail-joint, the parts being separated; Fig. 2, a horizontal section showing portions of the locking-plate in two positions, and Fig. 3 details of the bolt.

The bolt A is provided with a head at one end, and near the other is provided with diametrically-opposite beveled or inclined recesses B, which are also beveled across the end, forming shoulders, as shown at C, and leaving an end, D, beyond the said recesses. A plate, E, with a series of inclined surfaces, F, (corresponding to the number of bolts used,) is provided with slots G, extending laterally through it and opening on the inclined faces, and larger and preferably circular passages, H, communicating with the said slots and opening on the lower portion of the incline. In cross-section the combined passage and slot resemble the shape of a key-hole.

When it is desirable to form a rail-joint, the bolts A are first passed through ordinary fish-plates, I, and the rails K, and then through the passages H, which are of sufficient size to properly receive them and allow the shoulders C to project somewhat above the lower portion of the inclined surface F. The said shoulders

C being placed in line with the slot G, which is of about sufficient width to receive the narrowed portion of the bolt formed by the recesses B, the plate E is driven longitudinally, so as to bring the surface F in engagement with the shoulders C, which latter project on each side the slot, and by the wedge action the bolt is drawn as tightly as desired. The bolt having nearly or quite reached the end and thickest portion of the slot, a pin, L, is inserted in a hole laterally across the slot to the rear of the bolt, and thus completely preventing any retrograde movement of the bolt or bolts, the operation of one only having been described.

From the above it is clearly evident that the use of nuts is obviated, the operation of securing the same expedited, and the loosening of the same absolutely prevented. If the pins be allowed to project slightly, the ends may be clinched.

As the construction may be more or less modified without affecting the result accomplished, I do not wish to be confined to the exact construction shown, but reserve the right to vary the same consistent with the spirit of the invention.

I attach importance to the manner of forming the shoulders on the bolt, and to the fact that there is but one shoulder on each side thereof. By such a construction it will be seen that there is no obstruction offered to the adjustment of the bolt, as is the case where an inclined shoulder is formed by notching a bolt so as to form a shoulder on opposite sides of the wedge-key.

I claim—

Combined with a bolt provided with lateral inclined shoulders, a key having a correspondingly-inclined surface and a differential slot-opening on said surface, and a pin normally extending across said slot, substantially as and for the purpose specified.

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

WILLIAM H. BABCOCK.

Witnesses:

M. D. GIBBS,
PETER GOEBEL.