

W. F. SCHOWE.
Screw-Bolt.

No. 218,142.

Patented Aug. 5, 1879.

Fig. 1.

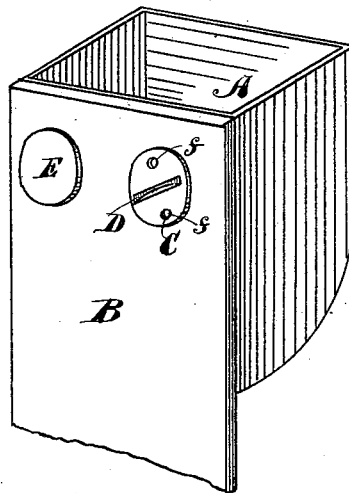


Fig. 2.

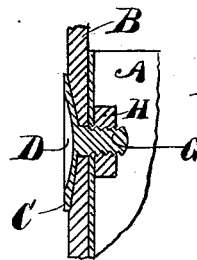
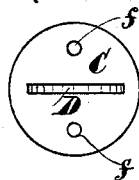


Fig. 3.

WITNESSES;
W. F. Schowe
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Per E. O. Hume
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UNITED STATES PATENT OFFICE.

WILLIAM F. SCHOWE, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN SCREW-BOLTS.

Specification forming part of Letters Patent No. **218,142**, dated August 5, 1879; application filed February 13, 1879.

To all whom it may concern:

Be it known that I, WILLIAM F. SCHOWE, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Flat-Head Bolts for securing buckets to elevator-belts, of which the following is a description, reference being had to the accompanying drawings.

Prior to my invention there has been great difficulty in securing elevator-buckets to belts in a firm and secure manner by the use of flat-head bolts.

The difficulty of holding the thin flat-headed bolt and preventing it from turning while the nut is being screwed up tightly, for securing the bucket to the belt, has heretofore been so great that in many instances such bolts have been discarded and rivets substituted therefor, because the nuts could not be screwed up tightly and were liable to work loose, thus permitting the buckets to drag on the boot, and frequently be torn from the belt.

The object of my invention is to prevent the bolt from turning while the nut is being screwed up tightly or being removed therefrom, and also to prevent the bucket from working loose on the bolts.

My invention consists in providing a screw-bolt with round or disk form, thin, broad, and flat head, provided with a nick or holes in which a screw-driver or other similar instrument may be inserted for holding the bolt while the nut is being screwed up tightly or removed therefrom.

The peculiar shape of the head of the bolt will not admit the slot to be cut fully across the face, because the head is so thin that the slot would weaken it.

The usual construction of such a bolt-head is flat on the outside surface and extremely thin at its periphery, with a slight increase in thickness as it approaches the center or shaft; hence this slot or recess must be milled or stamped deepest in the thickest or central part of the head, in order to retain sufficient material around the slot and edges of the head to prevent the head from breaking.

In the accompanying drawings, in which

like letters of reference in the different figures indicate like parts, Figure 1 is a perspective view of an elevator-bucket attached to a belt by one of my improved bolts and one of the ordinary construction. Fig. 2 is a plan view of the head of my newly-constructed bolt; and Fig. 3 is a sectional view of the bolt, the belt, and bucket.

A represents any ordinary elevator-bucket, and B the elevator-belt.

The bolt is constructed with the screw-shaft G, having a round or disk form, thin, broad, and flat head C, provided with a nick, D, or holes *f*, in which a screw-driver or other similar instrument may be inserted for operating the bolt.

The slot or recess D is milled or stamped in the thickest part of the head, yet not so deep as to cut through the head or to weaken it by cutting through at the periphery, as shown in Fig. 3.

The bolt is used in the ordinary manner—that is, the shaft G passing through the belt and rear side of the bucket, with the flat head against the belt on the outside. The nut H is then screwed on, and a screw-driver or other instrument for a like purpose is introduced into the milled or stamped recess D. Thus a means is provided whereby the bolt can be held and prevented from turning while the nut is being screwed tightly up and the head C embedded in the leather belt, or when the nut is removed.

It is obvious that the head C may be provided with two or more holes, *f*, as an equivalent of the slot D, adapted to receive prongs formed on the end of a screw-driver, in order to hold the bolt and prevent it from turning while the nut H is being screwed up or removed.

I am aware that screws have been made with thick flat heads with slots cut across the face for the screw-driver to operate in; but I am not aware that a thin broad flat-head bolt has ever been constructed with a slot or recess milled or stamped in the central part, as described, for the purpose specified.

What I claim as new, and desire to secure by Letters Patent, is—

A screw-bolt, G, having a round or disk form, thin, broad, and flat head C, provided with a nick, D, or its equivalent holes *f*, for a screw-driver, jointly with the nut H, as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM F. SCHOWE.

Witnesses:

E. O. FRINK,
H. H. FULTON.