

E. E. DAVENPORT.
BOLT LOCK.
APPLICATION FILED JULY 15, 1911.

1,016,554.

Patented Feb. 6, 1912.

Fig. 1.

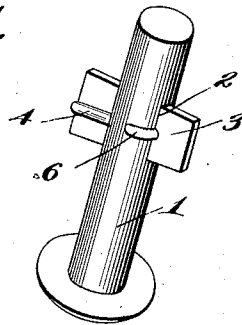


Fig. 1^a.

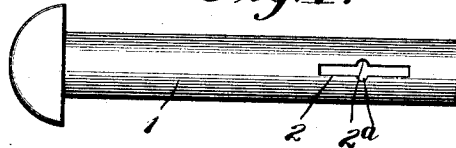


Fig. 2.

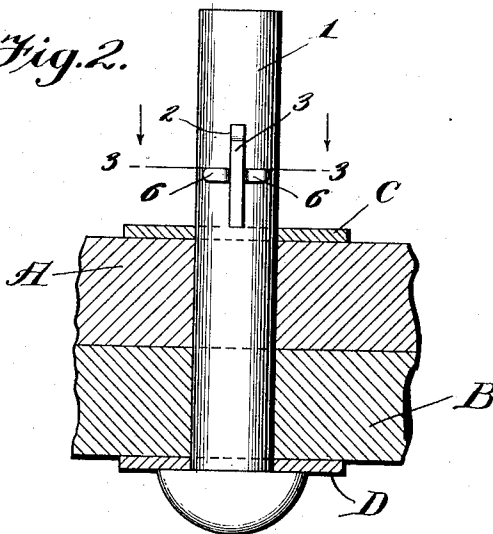


Fig. 3.

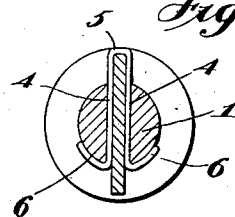
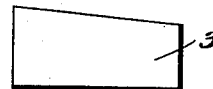


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

ELMER E. DAVENPORT, OF BARABOO, WISCONSIN, ASSIGNOR OF ONE-HALF TO MERWIN R. DAVENPORT, OF BARABOO, WISCONSIN.

BOLT-LOCK.

1,016,554.

Specification of Letters Patent.

Patented Feb. 6, 1912.

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To all whom it may concern:

Be it known that I, ELMER E. DAVENPORT, a citizen of the United States of America, residing at Baraboo, in the county of Sauk and State of Wisconsin, have invented certain new and useful Improvements in Bolt-Locks, of which the following is a specification.

The present invention relates to bolts and has for its purpose to provide a means for effectively securing a bolt in applied position without the use of the usual screw threaded nut; and wherein the securing means for the bolt is effectively locked in position and held against movement regardless of any strain or vibration to which the bolt may be subjected.

The invention further contemplates an arrangement wherein the bolts may be easily and cheaply manufactured for the application of the locking means; and wherein the whole arrangement presents a neat appearance and one which will suggest itself as appropriate for adoption for equipments requiring an extensive number of bolts as, for instance railroads.

With these and other objects in view the invention consists in the arrangement and combination of parts hereinafter claimed, and while the invention is not restricted to the exact details shown and described, still for the purpose of disclosure reference is had to the accompanying drawings, in which like reference characters designate the same parts in the several views.

The invention is shown by way of illustration in the accompanying drawings wherein—

Figure 1 is a perspective view of the bolt with the locking device applied thereto. Fig. 1^a illustrates the bolt slotted to receive the locking wedge and wedge key. Fig. 2 is an elevation of the bolt and locking key in applied position and showing the secured members in section. Fig. 3 is a transverse sectional view of Fig. 2 taken on the line 3—3, and Fig. 4 is a detailed view of the locking wedge employed.

Referring to the construction in detail and with like characters of reference designating corresponding parts in the different

views shown, 1 represents the bolt which is of the usual dimensions and is provided with an elongated aperture 2 designed to receive the locking piece which consists of a wedge piece or key 3. The bolt 1 may be of any shape in cross section, viz., round, elliptical, square, etc. The dimensions of the opening 2 are such as to receive the wedge key 3 and permit of said wedge being driven through the opening for the purpose of tightening the bolt in position as will be readily understood. The aperture 2 is formed with opposite side recesses 2^a to receive the locking member for the wedge. These recesses 2^a may of course be formed in the sides of the wedge 3.

The locking piece 3 is secured against displacement when once set into position through the medium of a pin consisting of a U-shaped member having parallel side portions 4 that lie against the side of the key 3 and fit within the recesses 2^a; and having a portion 5 which overlies the larger end of said key. The ends 6 of the side portions 4 are bent around and against the sides of the bolt 1 and are so disposed as to prevent the removal of the key 3 when once set and the key has been driven home and secured by the locking members (4, 5 and 6).

The invention is shown applied in Fig. 2 wherein the bolt 1 passes through a pair of members A and B which are to be held together and a pair of washers C and D are seated against the head of the bolt and the wedge key 3 to take up the wear of these members against the surfaces of the members A and B, as will be readily understood.

It is obvious that those skilled in the art may vary the details of construction and arrangement of parts without departing from the spirit of my invention, and therefore I do not wish to be limited to such features except as may be required by the claims.

What I claim as new and desire to protect by United States Letters Patent is:—

1. The combination with a bolt provided with an aperture; of a lock for said bolt comprising a wedge key fitting within said aperture; and a pin overlying one end of

said key and secured to said bolt, substantially as described.

2. The combination with a bolt provided with an aperture; of a lock for said bolt
5 comprising a wedge key fitting within said aperture; and a U-shaped pin fitting closely against the sides and end of the key and having its ends passing through said aper-

ture and bent around the sides of said bolt, substantially as described.

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

ELMER E. DAVENPORT.

Witnesses:

ADOLPH ANDRO,
FRANK GRIGGS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."