

A. J. WILSON & A. LARSON.
QUICKLY ADJUSTABLE BOLT.
APPLICATION FILED SEPT. 21, 1909.

1,005,492.

Patented Oct. 10, 1911.

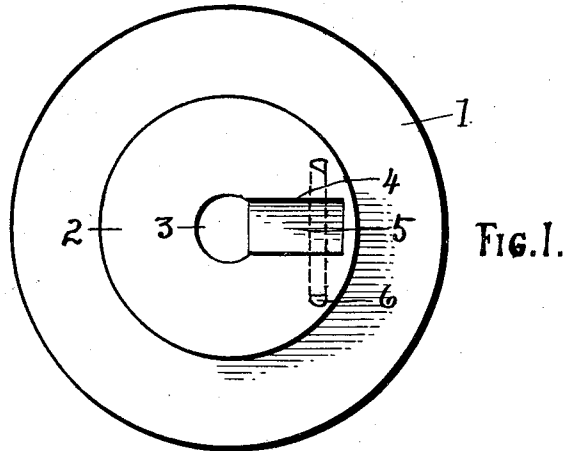


FIG. 1.

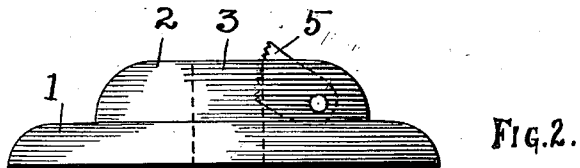


FIG. 2.

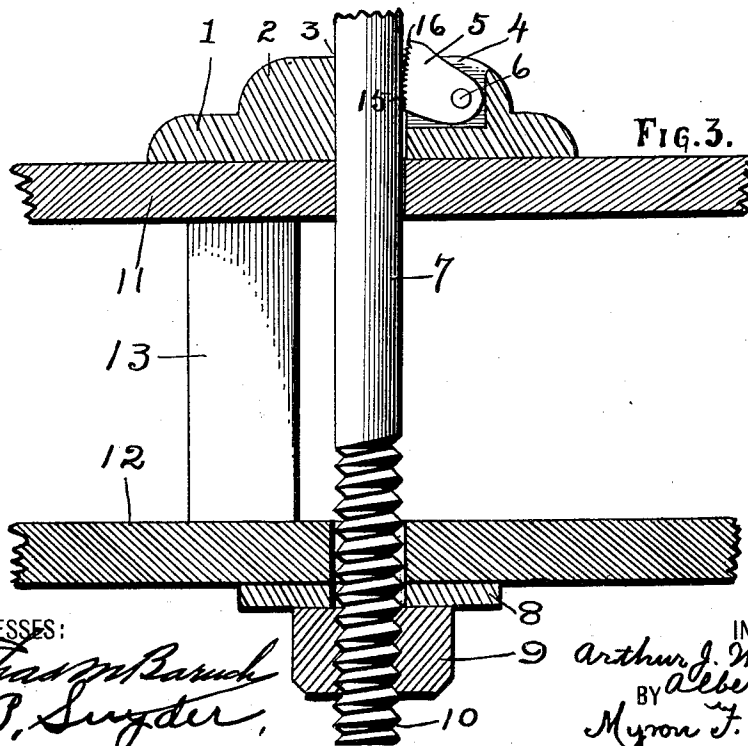


FIG. 3.

WITNESSES:
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ARTHUR J. WILSON, OF NEW YORK, AND ALBERT LARSON, OF PORT RICHMOND, NEW YORK.

QUICKLY-ADJUSTABLE BOLT.

1,005,492.

Specification of Letters Patent.

Patented Oct. 10, 1911.

Application filed September 21, 1909. Serial No. 518,860.

To all whom it may concern:

Be it known that we, ARTHUR J. WILSON, a citizen of the United States, and resident of the city, county, and State of New York, and ALBERT LARSON, a citizen of the United States, residing at Port Richmond, in the county of Richmond and State of New York, have invented certain new and useful Improvements in Quickly-Adjustable Bolts, of which the following is a specification.

Our invention relates to bolts and has for its object means to render them quickly adjustable to varying thicknesses of work.

In forming concrete walls between layers of sheathing it is necessary to fix the layers at specified distances from each other the distance being determined by spreaders or blocks of wood placed between them. To bind the sheathing against the spreaders it has been the custom to use bolts. But walls vary in thickness and bolts have been used capable of use on the thickest walls. When such bolts are used on thin walls it has been the custom to put washers under the heads of the bolts, or under the nuts, to fill up the unused length of bolt. These washers are often cut from wood, using up valuable time and causing trouble and expense. Moreover, bolts are capable of being removed from the cast walls from one end only, and often there is not room for the removal of the bolt and it has to be sawed off.

Our adjustable bolt may be used on various thicknesses of walls and may be removed from either direction. To accomplish this result the head of the bolt is loose upon the shank or rod of the bolt, and means are provided to secure it in any desired position along the rod.

In the drawings, in which similar characters of reference refer to like parts in the various figures, Figure 1 is a face view of our adjustable head; Fig. 2 is a side elevation; Fig. 3 shows our bolt with the adjustable head in section.

The head of the bolt 1 is provided with an enlargement or boss 2 and a hole 3 for the rod to slide freely in. A recess 4 in the boss contains the wedging device or dog 5 preferably pivoted upon the pin 6 mounted through the boss 2 and riveted at its ends, the dog being of a form such that it will extend beyond the plane of the head when contact of bolt and dog is initially had.

The head is slidably mounted upon a rod or shank 7 provided at its other end with the usual washer 8 and nut 9 mounted upon the screw threads 10.

In Fig. 3 the bolt is shown as applied to the sheathing 11 and 12 the two layers being held apart by a block or spreader 13.

The head may be shown in a different position and thus is capable of being used on a thicker wall.

In Fig. 2 the dog is shown in its loose position. In Fig. 3 it is shown in the position in which it binds the head to the rod, so that the rod cannot be forced downward to the left in this figure by any pressure due to screwing up the nut.

The heel of the dog, shown at 15, is nearer the pivot 6 than the toe 16. A tap of the hammer drives the toe of the dog into the position shown in Fig. 3 binding the rod tightly against the opposite side of the hole 3. If the hole is roughened and the toe of the dog is also roughened the head is held more securely. Case hardening renders the dog more durable.

To undo the bolt the nut is first loosened by being unscrewed. Then the rod is tapped with a hammer on the bottom end (Fig. 3) to free the dog and loosen the head so that it may be removed from the rod. Then the rod may be pulled out of the sheathing without removing the nut. Or the nut may be removed and the rod withdrawn in the opposite direction. The flange of the head 1 acts as a washer as well.

Many variations may be made in the details of construction without departing from the spirit of our invention.

What we claim is:

1. In a device of the character described, the combination of a bolt, a head adapted to fit over said bolt and having means which is designed to engage the bolt to position the head longitudinally of the bolt to prevent movement of the latter in one direction only, said means extending beyond the plane of the head upon its initial engagement with the bolt.

2. In a device of the character described, the combination of a bolt, a head adapted to fit over said bolt and having a pivoted dog designed to engage the bolt to position the head longitudinally of the bolt to prevent movement of the latter in one direction

only, said dog extending beyond the plane of the head upon its initial engagement with the bolt.

3. In a device of the character described,
5 the combination of a bolt, a head having an opening to receive said bolt and having a recess on its outer side and at one side of said opening, a member in said recess and adapted to engage the bolt to position said
10 head longitudinally of the latter, said member extending beyond the plane of the head upon its initial engagement with the bolt.

4. The combination with a headless bolt,

and its nut, of a member slidable longitudinally of the bolt and having bolt gripping 15 means exposed on the outer side of the member and adapted to restrict the sliding movement in one direction.

In testimony whereof we have affixed our signatures, in presence of two witnesses.

ARTHUR J. WILSON.
ALBERT LARSON.

Witnesses:

MYRON F. HILL,
HELEN REYNOLDS.

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