

(No Model.)

E. H. DUCHEMIN.  
JOINT BOLT.

No. 470,995.

Patented Mar. 15, 1892.

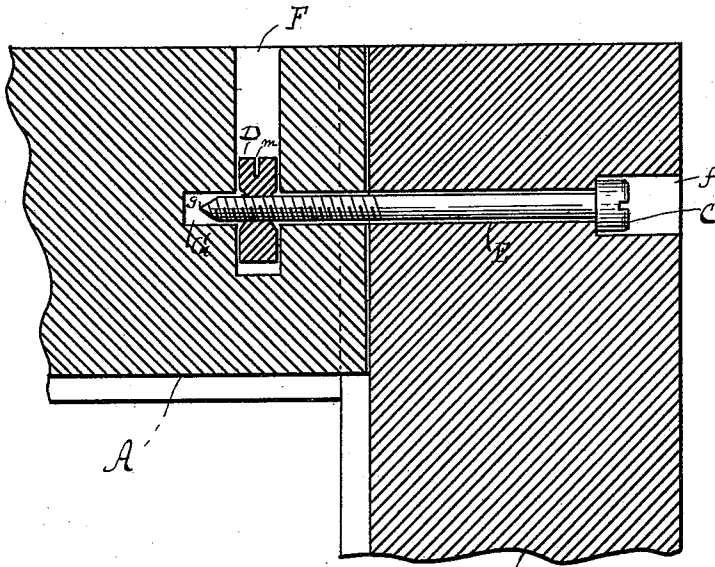


Fig. 1. B

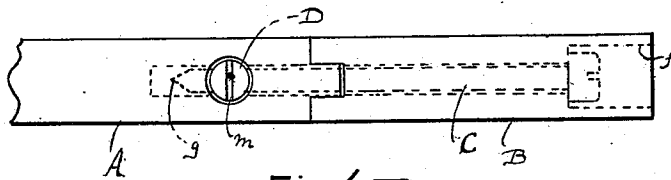


Fig. 2.

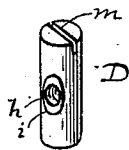


Fig. 3.

WITNESSES

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# UNITED STATES PATENT OFFICE.

EDMUND H. DUCHEMIN, OF NEWBURYPORT, MASSACHUSETTS.

## JOINT-BOLT.

SPECIFICATION forming part of Letters Patent No. 470,995, dated March 15, 1892.

Application filed June 15, 1891. Serial No. 396,247. (No model.)

*To all whom it may concern:*

Be it known that I, EDMUND H. DUCHEMIN, a subject of Her Britannic Majesty, residing at Newburyport, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Joint-Bolts; and I do hereby 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, forming part of this specification, in which—

Figure 1 is a sectional view showing my improved joint-bolt in use; Fig. 2, a top plan view of the same, and Fig. 3 a perspective view of the nut removed.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to an improvement in nuts for use on joint-bolts; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation:

In the drawings, A B represents the joint-sections, C the bolt, and D the nut. The joint is constructed in the ordinary manner, the section B being provided with the usual bolt-opening E, counterbored at *f* to receive the bolt-head, and the joint-section A being socketed at F and provided with a bolt-opening G at right angles to said socket in position to register with the bolt-opening E when the joint-sections are joined. The bolt C has its threaded end pointed at *g*. The nut D is cylindrical in form and is provided centrally with a threaded bolt-opening *h*, the mouths of said opening flaring or being countersunk

at *i*. One end of the bolt is provided with a transverse slot *m* for receiving a tool.

In constructing the joint the tongued and grooved sections A B being joined, the bolt C is inserted in the bolt-openings E G, so that the point *g* of said bolt projects slightly into the vertical socket F. The nut D having been inserted in the socket F by means of a screw-driver and its slot *m*, said nut can be rotated. The point of the bolt being held in contact with said nut readily enters the countersunk or flaring mouth *i* of its bolt-opening *h* as soon as said opening registers with said point, when the bolt can be turned into the nut, clamping the joint-sections together in a manner which will be readily understood without a more explicit description.

By employing the round nut described, with its flaring bolt-opening and driver-slot for rotating said nut, the objectionable features attending the use of nuts of the ordinary form employed in a device of this character are avoided.

Having thus explained my invention, what I claim is—

1. In a device of the character described, a round nut provided with a threaded bolt-opening having flaring or countersunk mouths, substantially as and for the purpose set forth.

2. The nut D, provided with the bolt-opening *h*, having the countersunk mouths *i*, and tool-slot *m*, substantially as and for the purpose set forth.

3. In a device of the character described, a pointed screw-bolt, in combination with a cylindrical nut having a bolt-opening provided with countersunk or flaring mouths, and a tool-slot in one end of said nut, substantially as and for the purposes set forth.

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

EDMUND H. DUCHEMIN.

Witnesses:

J. WARREN FROST,  
WILLIAM E. WOODMAN.