

W. DUNLOP.
Bolt Trimmer.

No. 133,972.

Patented Dec. 17, 1872.

Fig. 1.

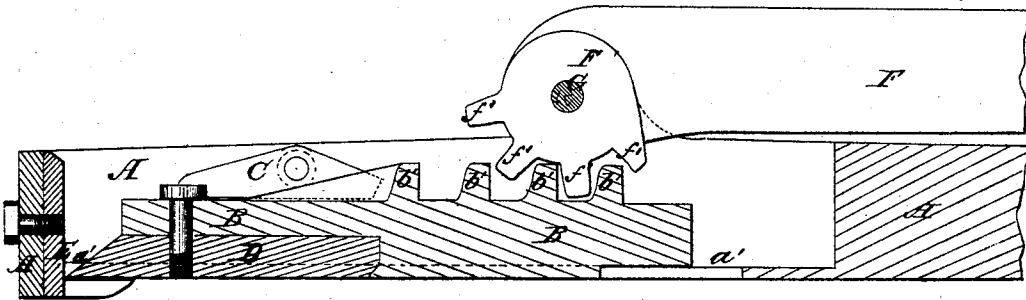
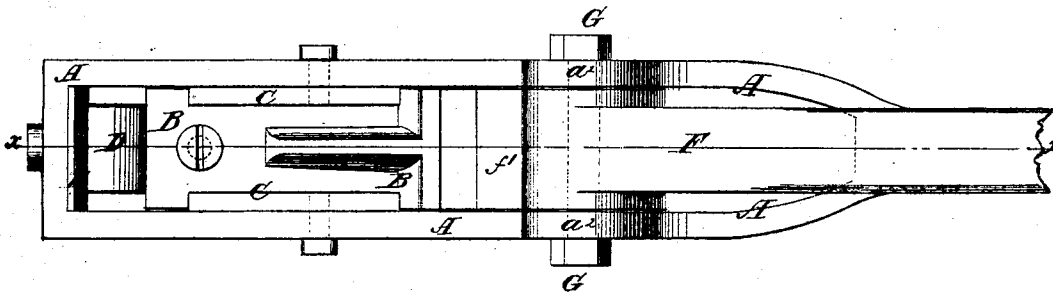


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM DUNLOP, OF FULLARTON, CANADA.

IMPROVEMENT IN BOLT-TRIMMERS.

Specification forming part of Letters Patent No. 133,972, dated December 17, 1872.

To all whom it may concern:

Be it known that I, WILLIAM DUNLOP, of Fullarton, in the county of Perth, Province of Ontario and Dominion of Canada, have invented a new and useful Improvement in Bolt-Trimmer, of which the following is a specification:

Figure 1 is a longitudinal section of my improved bolt-trimmer taken through the line *x x*, Fig. 2, the handles being broken off. Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

My invention is an improvement in the class of bolt-trimmers in which a cutting tool or chisel is reciprocated by a rack-bar and toothed segment; and it consists in the construction and arrangement of devices forming the complete or operative implement, as hereinafter described.

A is the lower lever or handle of the implement, the forward end of which is made wide and has a slot formed in it to receive the operating parts of the device. B is a block, which slides back and forth upon ways *a¹* formed upon the lower parts of the inner surfaces of the side bars that form the slot, and which is held down to its place by stays C attached to the upper parts of the said surfaces. In a recess in the forward part of the lower side of the block B is secured, by a screw or bolt, a chisel, D, the lower side of which is flush with the lower side of the handle or lever A. The edge of the chisel D, when the block B is pushed forward, strikes against a steel cushion or plate, E, secured by a screw or bolt to the inner surface of the forward end of the

lever A. The lower edge of the end of the lever A and the lower end of the plate E project a little below the lower surface of the lever A to rest against the edge of the nut, while the lower side of said handle A rests upon the face or upper side of said nut, and the chisel D shaves off the projecting end of the bolt. Upon the upper side of the rear part of the sliding block B are formed cogs or teeth *b'*, into which mesh the cogs or teeth *f'* formed upon the rounded forward end of the upper lever or handle F. The forward end of the lever or handle F is pivoted by a bolt, G, to projections or lugs *a²* formed upon the rear parts of the upper edges of the slotted forward end of the lower lever A, so that the sliding block B and chisel D may be drawn back by raising the free end of the lever F, and forced forward to make a cut by forcing the said end downward.

Disclaiming the use in bolt-trimmers of a reciprocating-cutter, or cutter-bar, and a toothed segment for operating the same—

I do claim as new and of my invention—

The improved implement herein described, formed by the cutter D, the block or bar B provided with the teeth *b'*, the slotted lever A having ways *a¹* and a downward projection at its front end, the cushion-plate E, stays C, and the lever F with a toothed segmental head fulcrumed at G, all constructed and arranged as and for the purpose specified.

WILLIAM DUNLOP.

Witnesses:

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