W. DUNLOP.

Bolt Trimmer.

No. 133,972.

Patented Dec. 17, 1872.

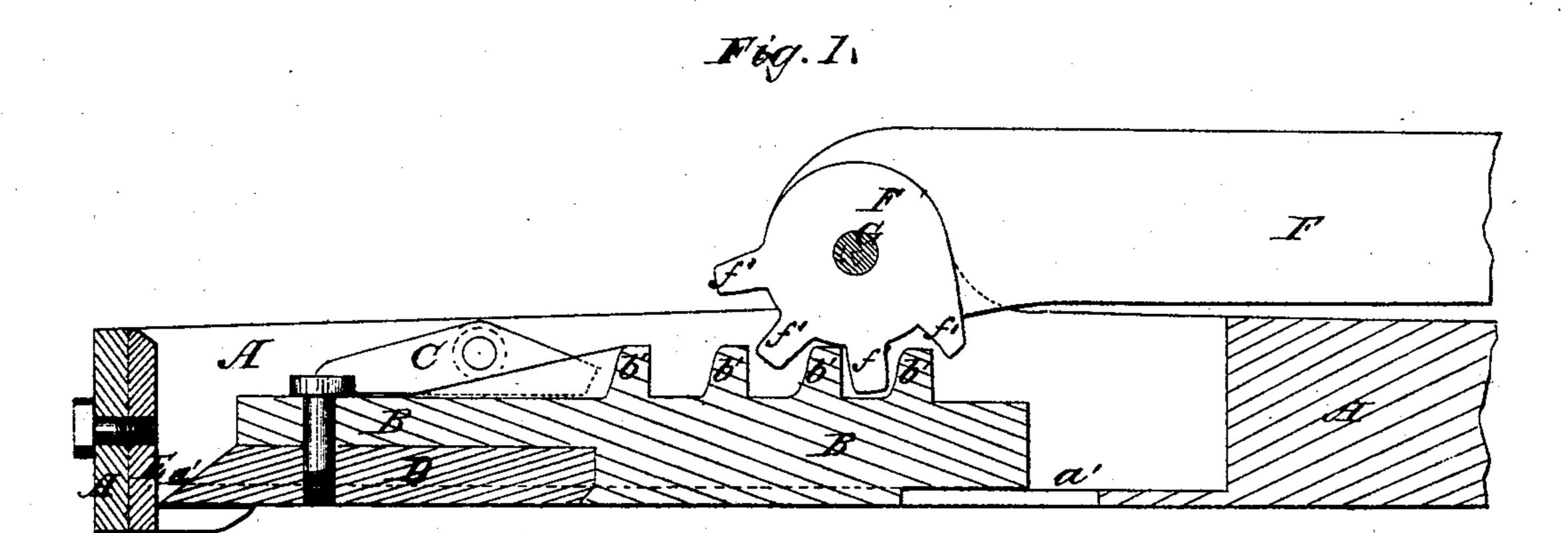
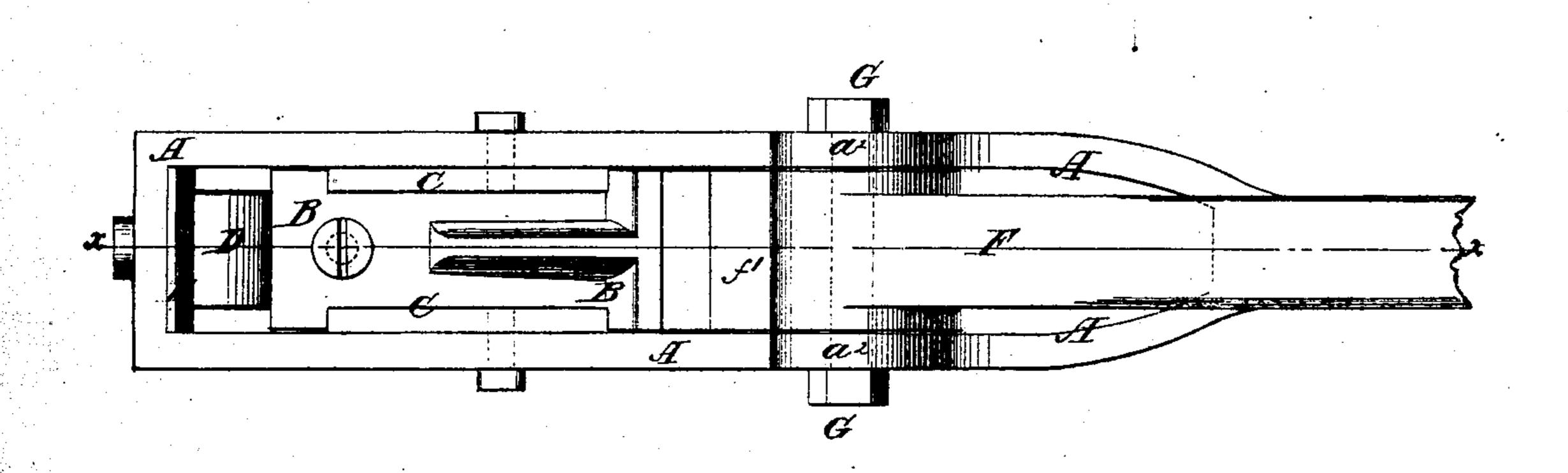


Fig. 2.



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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 corre-

sponding 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 a^1 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 a^2 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:

LEON M. CLEUCH, JAMES COLEMAN.