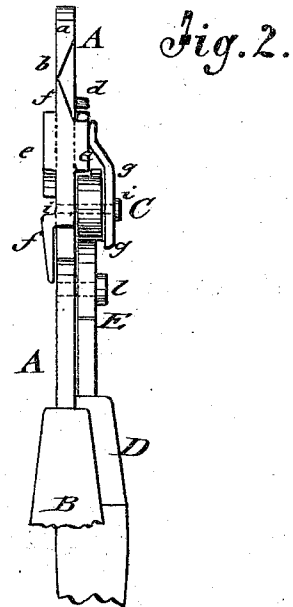
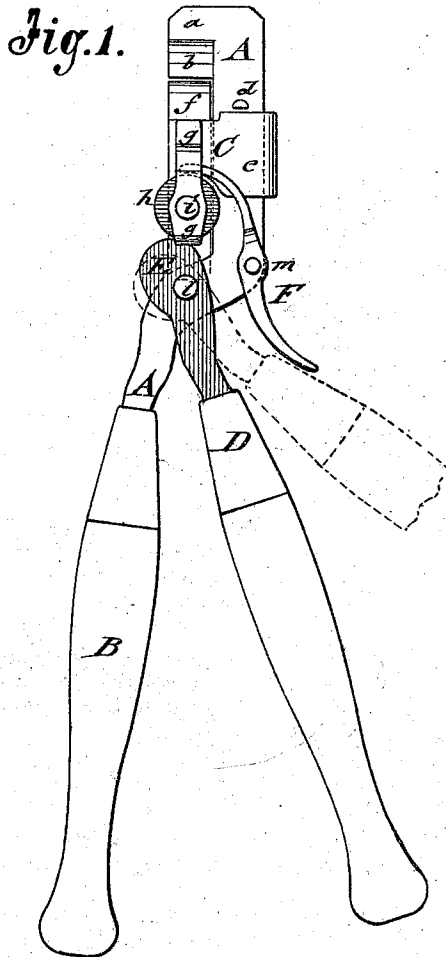


L. H. SMITH.
Bolt and Rod-Cutters.

No. 143,645.

Patented Oct. 14, 1873.



Witnesses.

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UNITED STATES PATENT OFFICE.

LEWIS H. SMITH, OF STRYKER, OHIO.

IMPROVEMENT IN BOLT AND ROD CUTTERS.

Specification forming part of Letters Patent No. **143,645**, dated October 14, 1873; application filed June 7, 1873.

To all whom it may concern:

Be it known that I, LEWIS H. SMITH, of Stryker, in the county of Williams and State of Ohio, have invented a new and Improved Bolt and Rod Cutter, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front view of my improved bolt and rod cutter, and Fig. 2 a side view of the same.

Similar letters of reference indicate corresponding parts.

The object of my invention is to furnish to mechanics and others an improved bolt and rod cutter, which is of simple and cheap construction, and is powerful and effective in action. My invention consists of a main cutter lever or bar, to which is attached an eccentric lever, which bears on the revolving wheel of a sliding cutter acting on the bolts or rods.

The opening of the cutters is produced by the action of the eccentric lever on a curved lever having its fulcrum on the main cutter-piece, and acting also on the sliding cutter.

In the drawing, A represents the main cutter piece or bar, set into a handle, B, or otherwise suitably connected to produce leverage. Its lower end is curved, its middle part straight to guide the sliding cutter C, and its end provided, under right angles, with a side extension, *a*, which has a sharpened edge or blade, *b*, toward the handle end. A lug, *d*, of the middle part arrests the sliding motion of the cutter C. The sliding cutter C consists of a sleeve, *e*, which carries below cutter-blade *b*,

and parallel with it, the cutter *f*. An extension below sleeve *e* is provided, in connection with projecting arm *g*, with the revolving wheel or roller *h*, turning freely on shaft or bolt *i*. The lower end of cutter *f* extends still farther by bending over main piece A and guiding the cutter thereon. The strong lever D, with eccentric E, is connected, by a strong shaft or bolt, *l*, to main piece A below roller *p*, and presses thereon in bringing lever D toward main piece A, forcing the sliding cutter C against the cutting-edge *b*. The curved lever F, with its fulcrum at *m*, rests with its upper end on roller *h*, so that on the side motion of lever D its lower end is acted upon, opening the cutter-edges by the downward sliding of cutter C.

On account of the comparatively small friction, the working of the instrument is easy and rapid.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of main cutter-piece A, sliding cutter C, eccentric lever D E, and curved lever F, substantially as specified, and for the purpose set forth.

-2. The sliding cutter C, consisting of sleeve *e*, cutter *f*, arm *g*, and roller *h*, as specified.

LEWIS HENRY SMITH.

Witnesses:

GEO. DE MERITT,
F. R. FISH.