(No Model.)

J. S. BRIGHT.

CARRIAGE BOLT CUTTER.

No. 262,638. Patented Aug. 15, 1882.

Fig. 1.

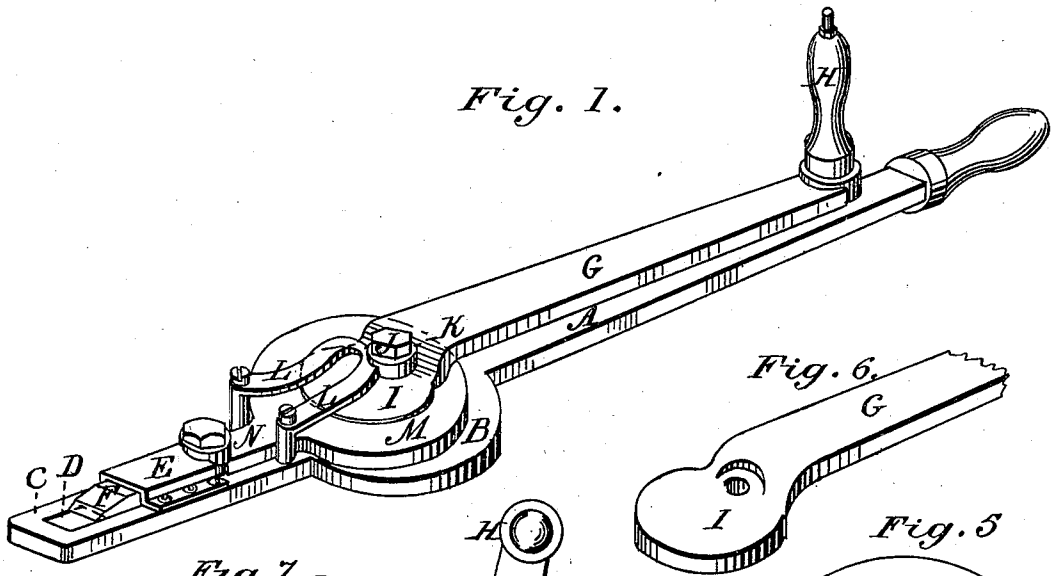


Fig. 6.

Fig. 5

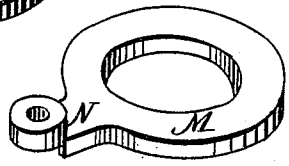


Fig. 7.

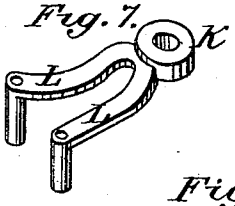


Fig. 8

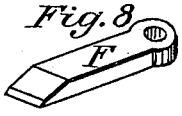


Fig. 2.

Fig. 3.

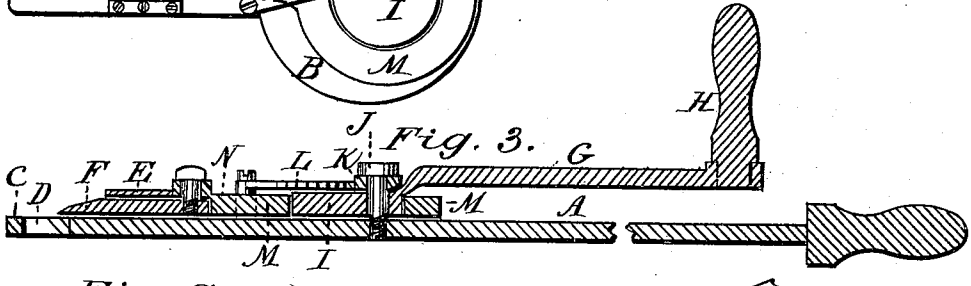
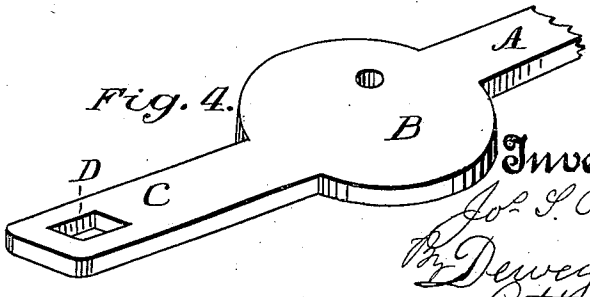


Fig. 9.



Fig. 4.



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UNITED STATES PATENT OFFICE.

JOSEPH S. BRIGHT, OF SAN BERNARDINO, CALIFORNIA.

CARRIAGE-BOLT CUTTER.

SPECIFICATION forming part of Letters Patent No. 262,638, dated August 15, 1882.

Application filed June 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH S. BRIGHT, of San Bernardino, county of San Bernardino, State of California, have invented an Improved Carriage-Bolt Cutter; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to an apparatus for cutting and trimming off the ends of carriage-bolts after the nuts have been screwed up into place; and it consists of an oblong slotted guide, upon which the cutter moves, the bolt passing into the slot, and being forced against the end of it, where it is held as the cutter moves up against it. This guide has an enlargement or table, upon which the actuating mechanism of the cutter works, and an extension back of this forms a handle, by which it is held. To the rear end of the cutter-bar an eccentric-strap is hinged or pivoted, and this is actuated by an eccentric, which is turned within the strap by a continuation or handle, which extends along the holding-handle previously mentioned. The eccentric has a central bolt, which is properly braced, and holds it firmly to the table, so that it moves the eccentric-strap when turned; but the cutter has a straight reciprocating motion.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my apparatus with the two handles in line with each other and the cutter advanced. Fig. 2 is a plan showing the operating-handle of the eccentric turned to one side to retract the cutter. Fig. 3 is a longitudinal vertical section taken through the eccentric. Figs. 4, 5, 6, 7, 8, and 9 are detail views.

A is a handle-bar of sufficient length, by which to hold the device and give the proper leverage in operating.

B is a circular enlargement or table, upon which the eccentric is mounted and pivoted, and C is an extension beyond the table and in line with the handle. This extension is slotted at D to admit the end of the bolt to be cut, which will have its side resting against the end of the slot D. Upon this extension is bolted or otherwise fixed a guide, E, through which the cutter F slides, its edge moving in a straight line just above the slot D.

G is a second handle-bar, extending above the handle A, and having about the same length. Its handle H may stand at right angles with the bar, as shown, so as to be more easily operated. The opposite end has a circular enlargement, I, which rests upon the enlargement or table B, and is made to turn upon a bolt, J, which passes through it at one side of the center, so that when turned by its handle its motion will be eccentric. The bolt has a shoulder, so that it can be secured firmly into the table B, and a collar or sleeve, K, surrounds its upper end, having arms L, which project upon each side, and are fixed to standards upon the extension C, as shown. These support and steady the upper end of the bolt, so that the strain brought upon the eccentric in moving the cutter will not loosen or bend it.

Around the eccentric I is fitted a strap, M, which has an extension, N, and the end of this has a joint to unite it to the rear end of the cutter-bar F.

The operation will thus be as follows: The handle-bar G is turned around so as to stand at an angle with the bar A, and this also turns the eccentric and retracts the cutter-bar, so that the opening or slot D may by placed over a bolt. The handle-bar G is then drawn up toward the handle A, and this rotates the eccentric and forces the cutter F forward against the bolt, which is held and steadied by the end of the slot D, so that the cutter trims it off smoothly and as closely to the nuts as may be desired.

I am aware that cutters have been operated by crank-arms for a similar purpose; but the cutter was connected directly with the crank, so that when moved its edge would describe a small curve, due to the length of the stroke.

In my device the cutter moves in a fixed guide, and has a jointed connection with the eccentric, so that its own motion is in a straight line, which experience proves to give the cleanest and smoothest cut.

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

A bolt-cutting device consisting of the handle A, with its table B and slotted extension C, in combination with the eccentric I, having the operating-handle G and turning within the eccentric-strap M, and the reciprocating cutter F, moving in the guide E and jointed or hinged to the eccentric-strap extension N, substantially as herein described.

In witness whereof I have hereunto set my hand.

JOSEPH S. BRIGHT.

Witnesses:
G. W. EMERSON,
S. H. NOURSE.