No. 674,088. Patented May 14, 1901.

A. HOAK.

BOLT CUTTER AND NUT SPLITTER.

(Application filed Feb. 12, 1901.)

(No Model.)

Fig. 1.

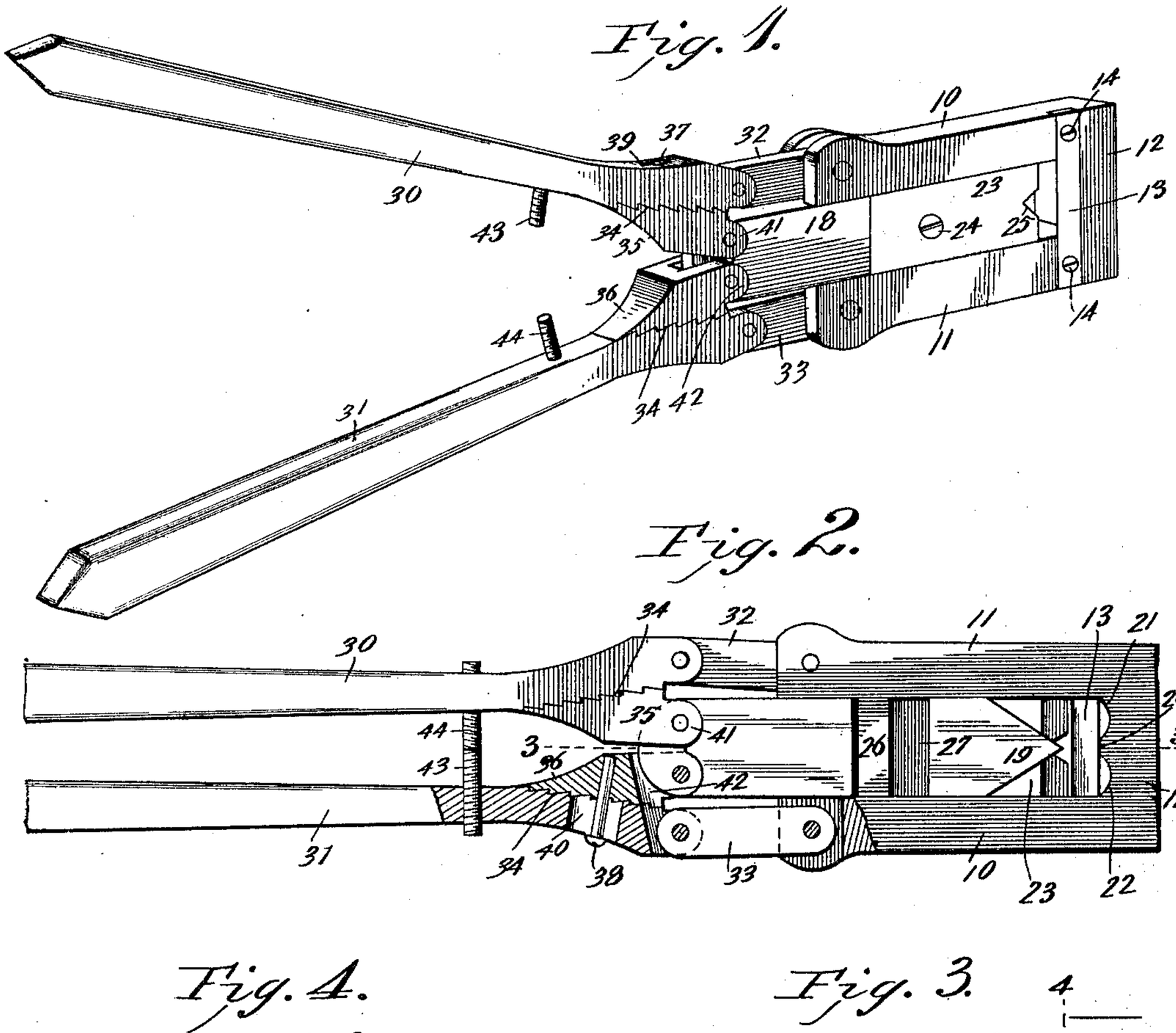


Fig. 2.

Fig. 4.

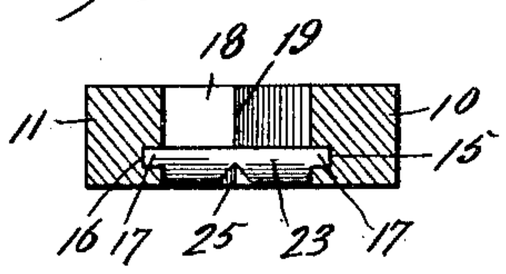


Fig. 3.

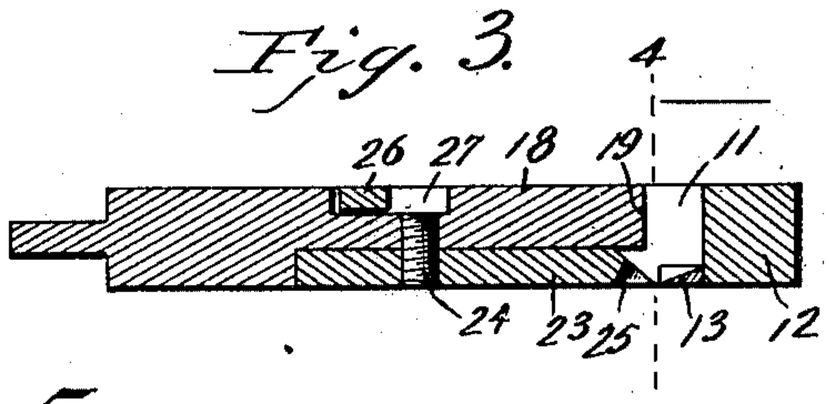
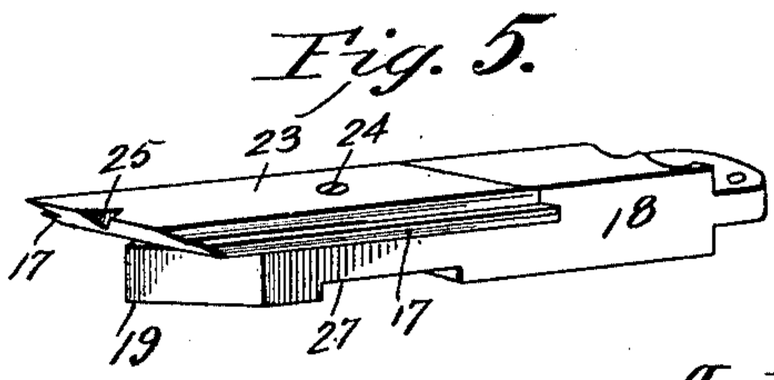


Fig. 5.



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UNITED STATES PATENT OFFICE.

ABIJAH HOAK, OF STERLING, ILLINOIS, ASSIGNOR OF ONE-HALF TO WILLIAM B. CAROLUS, OF SAME PLACE.

BOLT-CUTTER AND NUT-SPLITTER.

SPECIFICATION forming part of Letters Patent No. 674,088, dated May 14, 1901.

Application filed February 12, 1901. Serial No. 47,026. (No model.)

To all whom it may concern:

Be it known that I, ABIJAH HOAK, a citizen of the United States, residing at Sterling, in the county of Whiteside and State of Illinois, have invented a new and useful Bolt-Cutter and Nut-Splitter, of which the following is a specification.

This invention relates to combined nut-splitters and bolt-cutters; and it has for its object to provide a simple and efficient device of this nature which will be easy of operation and in which the parts may be readily adjusted to secure the best results under different working conditions.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing the complete tool. Fig. 2 is a side elevation, partly in section, showing the opposite side of the tool from that shown in Fig. 1. Fig. 3 is a section on line 3 3 of Fig. 2. Fig. 4 is a section on line 4 4 of Fig. 3. Fig. 5 is a perspective view showing the movable cutter.

Referring now to the drawings, the implement comprises a frame including parallel sides 10 and 11 and a connecting end 12, and set into the side pieces and directly adjacent to the end piece at one side of the frame is a cutting-blade 13, extending transversely of the interspace separating the sides of the frame and with its cutting edge directed away from the closed end of the frame. This cutting-blade is held removably in place by means of screws 14.

In the inner faces of the sides of the frame are formed longitudinal grooves 15 and 16, and in these grooves are slidably engaged the beads 17 at the sides of a block 18, fitted slidably in the frame, and the forward end of this block—that is, the end in the direction of the closed end of the frame—is tapered to a cutting edge 19, which is adapted to act against the inner face of the end 12 of the frame in the rear of the cutting-blade. This tapered end of the block, which is the nut-cutting blade, engages a nut and presses it against the end 12 and cuts into the opening thereof, the taper of the blade acting to force the sides of the cut apart, and thereby assist in splitting the nut. The end of the frame includes the bearing portion 20 (shown in Fig. 2) and the recesses 21 and 22 at the sides thereof, said recesses permitting the corners of the nut to be pressed rearwardly during the cutting operation.

Coöperating with the cutting-blade 13 is a blade 23, which is seated in a recess in the block 18 and held fixedly by a screw 24, passed through the block and engaged therewith. This blade 23 has its forward edge tapered to form a cutting edge for cutting off bolts against the blade 13, and the central portion of the blade 23 is notched, as shown at 25, to hold the bolt against lateral displacement during the cutting operation.

Slidable movement of the block 18 in the frame is limited by means of a bar 26, engaged in transverse slots in the sides of the frame and lying in a transverse slot 27 in the face of the block, the slot in the block being somewhat wider than the bar to permit of movement of the block. To move the block, levers or handles 30 and 31 are provided and which are pivotally connected at their ends to links 32 and 33, which in turn are pivotally connected to the ends of the sides 10 and 11 of the frame of the implement. The mutually-adjacent faces of the levers adjacent to their pivoted ends are serrated, as shown at 34, and against these serrated faces are disposed blocks 35 and 36, having also serrated faces to register therewith, and to hold these blocks in place upon the levers screws 37 and 38 are passed through longitudinal slots 39 and 40 in the levers and into the blocks. When the screws are loosened, the blocks may be adjusted on the levers. The blocks are provided with perforated ears 41 and 42, between which is disposed the rear end of the block 18, so that as the levers are operated the block will be reciprocated in the frame. By adjusting the positions of the blocks on the levers the path of movement of the block 18 may be changed.

To limit the movement of the levers toward each other, and thus limit the throw of the cutting-blades on block 18, set-screws 43 and 44 are engaged, with the levers in position to strike end to end, and these screws may be adjusted to vary the throw of the levers to correspond to different working conditions.

It will be understood that in practice modifications of the specific construction shown may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. A device of the class described comprising a frame including spaced sides and a connecting end piece a block slidably mounted in the frame for movement toward and away from the end piece said block having its end adjacent to the end piece tapered to a cutting-blade to act against the end piece, a second blade upon the block, said block having a transverse slot, a stop-bar engaged with the frame and with the slot, and levers pivoted to the sides of the frame and to the block for reciprocating the latter.

2. A device of the class described comprising a frame including sides and a connecting end piece, a blade-carrying block slidably mounted between the sides for movement toward and away from the end piece, links pivoted to the sides of the frame, levers pivoted to the links, and blocks adjustably mounted upon the levers and pivoted to the block.

3. A device of the class described comprising a frame including sides and a connecting end piece, a block slidably mounted between the sides and carrying a blade, levers pivotally connected with the side pieces of the frame and having serrated inner faces and slots leading through said faces, and serrated blocks disposed against the serrated faces and pivoted to the sliding block, said slots having screws passed therethrough and engaged with the blocks.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ABIJAH HOAK.

Witnesses:
F. E. ANDREWS,
ELLA HADEL.