

(No Model.)

G. S. NOEL.
COMBINED NUT AND BOLT CLIPPER.

No. 598,954.

Patented Feb. 15, 1898.

Fig. 1.

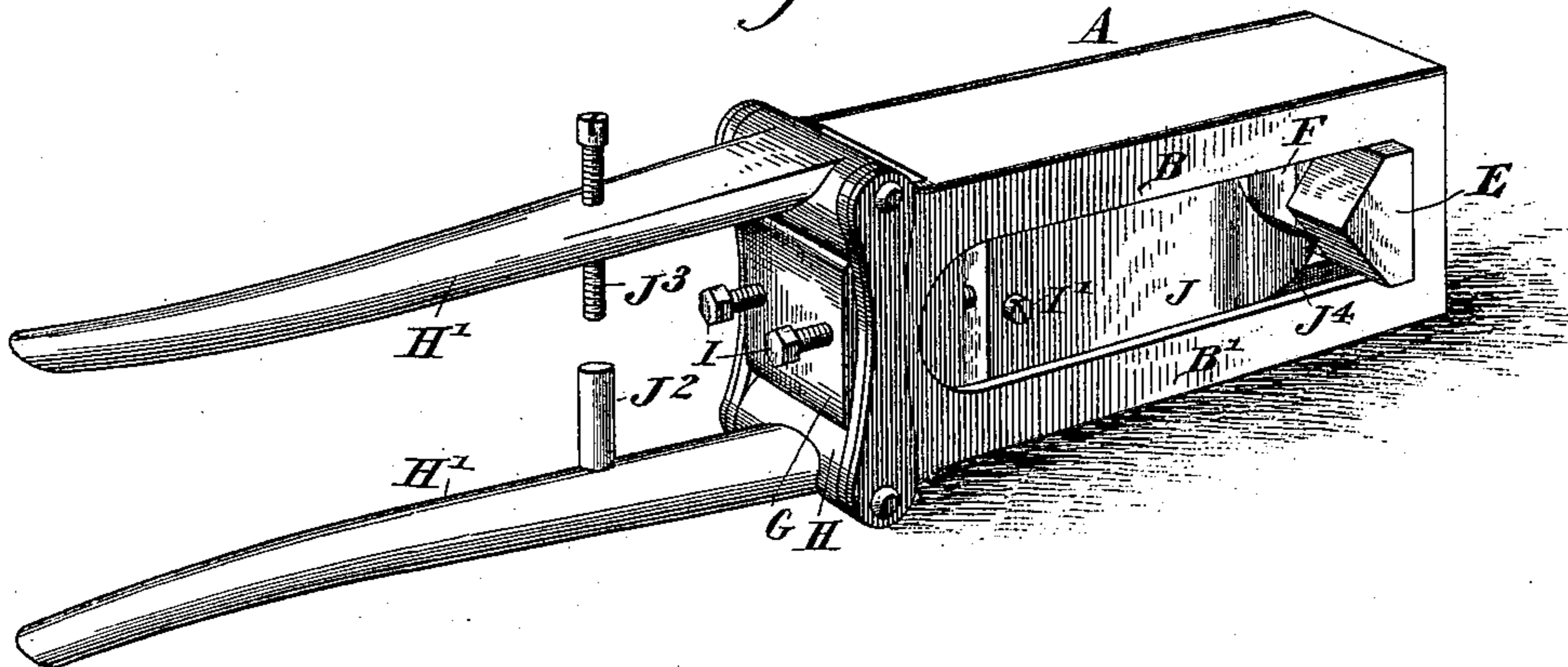


Fig. 2.

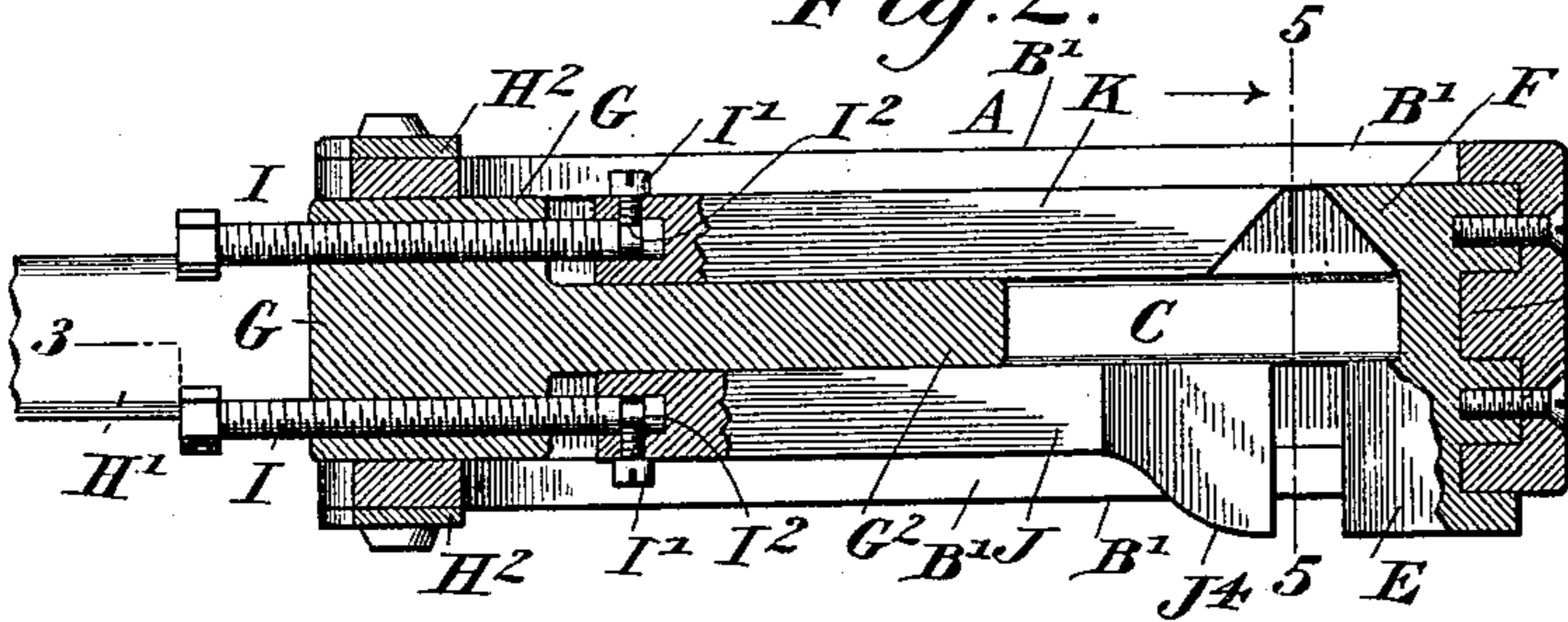


Fig. 4.

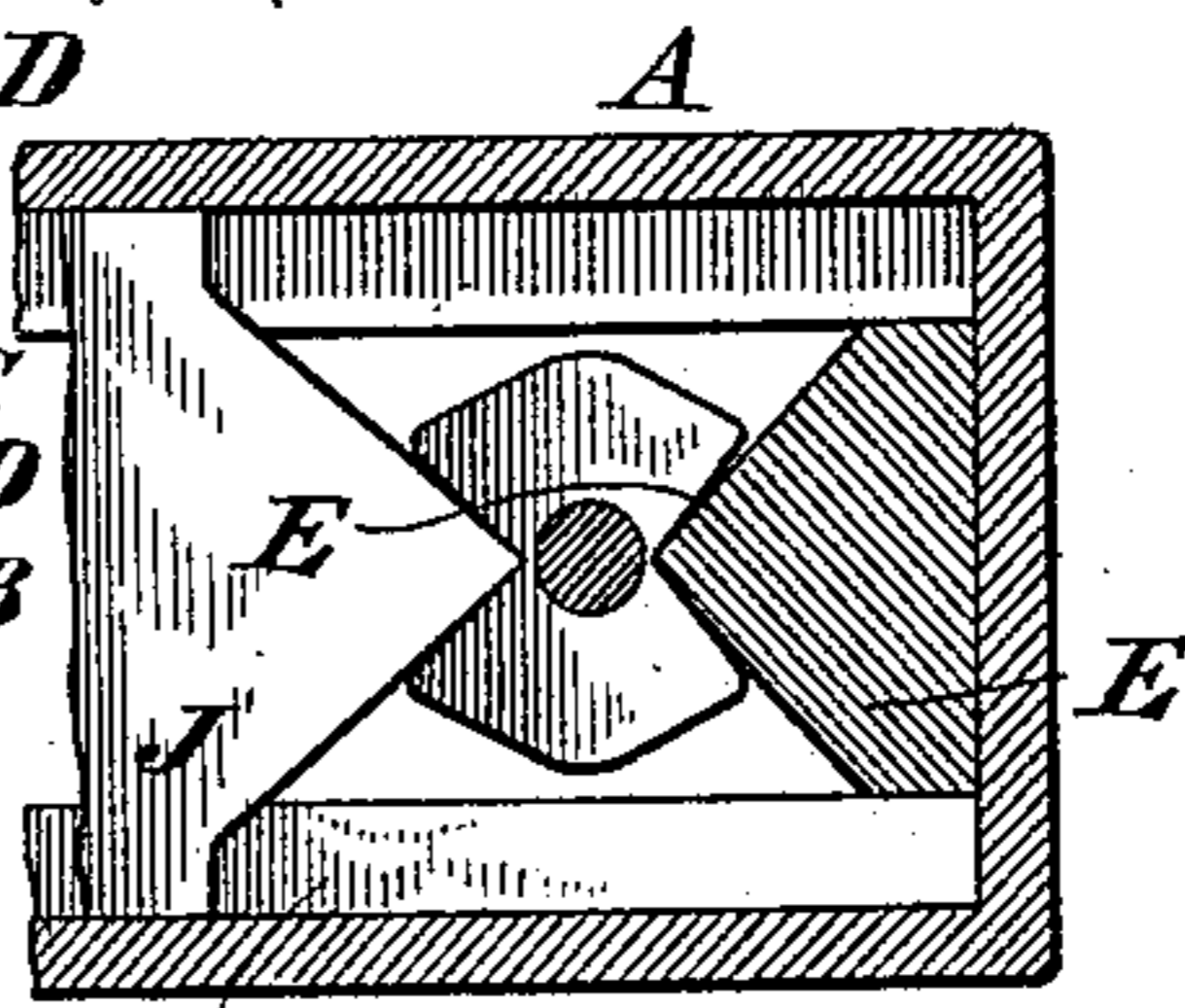


Fig. 3.

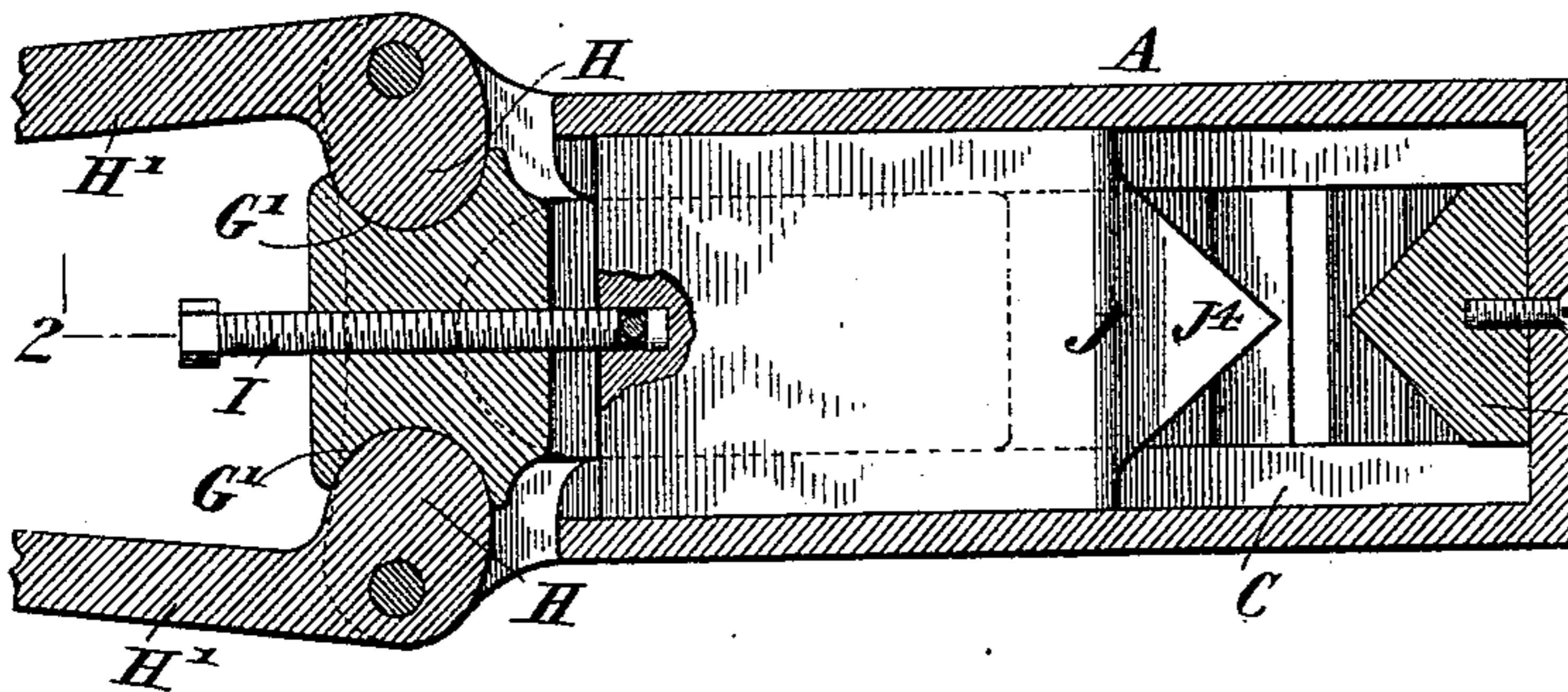


Fig. 5.

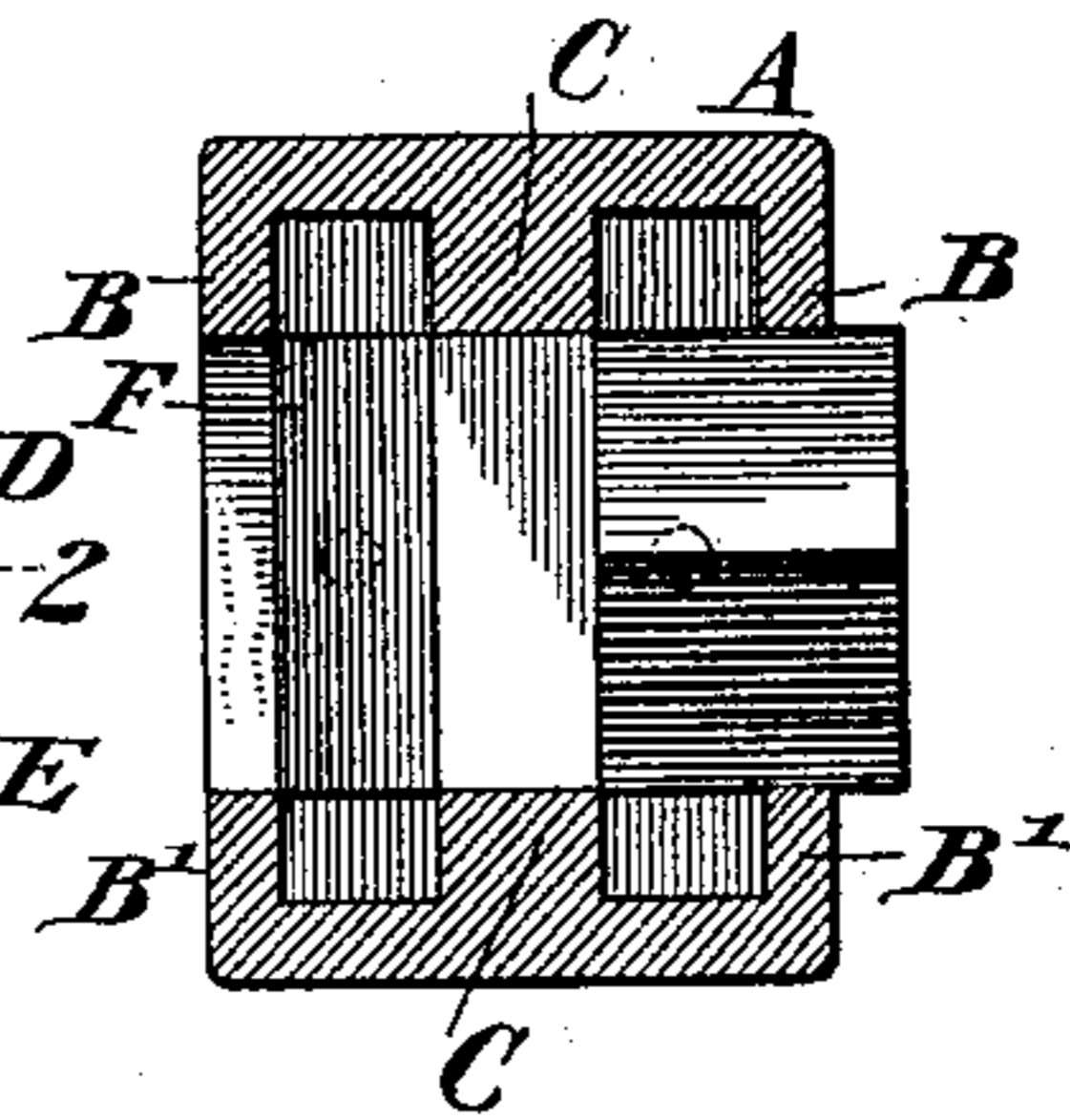
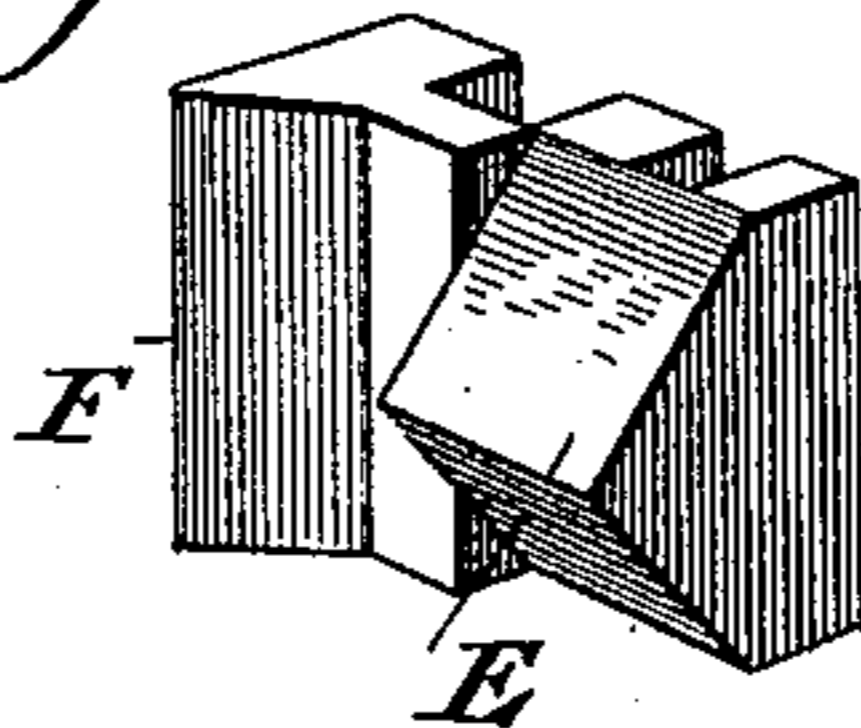


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE S. NOEL, OF CRAB TREE, PENNSYLVANIA.

COMBINED NUT AND BOLT CLIPPER.

SPECIFICATION forming part of Letters Patent No. 598,954, dated February 15, 1898.

Application filed May 19, 1897. Serial No. 637,279. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. NOEL, residing at Crab Tree, in the county of Westmoreland and State of Pennsylvania, have
5 invented a new and useful Combined Bolt and Nut Clipper, of which the following is a specification.

My invention relates to a combined nut and bolt clipper; and it has for its object to cut
10 a nut from a bolt where it is impossible to remove the nut with a wrench without in any manner destroying the bolt, and also to cut bolts.

My invention consists of a suitable frame
15 having at one end thereof a pair of stationary cutters, the cutting edges of which are at right angles to each other, and at the other end the sliding knives, having the cutting edges correspondingly arranged, which are
20 operated by a suitable plunger. The sliding knives have suitable means in connection with them for adjusting or regulating the sliding movement, so that any-sized nut may be cut off any-sized bolt without cutting the
25 bolt.

My invention also consists of certain other details of novel construction that will be hereinafter more fully described, and specifically pointed out in the claims.

30 In order that my invention may be fully understood, I will proceed to describe the same with reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a nut and
35 bolt clipper constructed in accordance with my invention. Fig. 2 is a horizontal section taken on the line 2 2 of Fig. 3. Fig. 3 is a vertical longitudinal section taken on the line 3 3 of Fig. 2. Fig. 4 is a detail view of the
40 frame and cutting-knife shown in Fig. 3. Fig. 5 is a transverse section taken on the line 5 5 of Fig. 2, and Fig. 6 is a detail perspective view of the stationary cutters.

In the said drawings, A represents the open
45 frame of the clipper, which may be of any size and of any material. It is constructed, preferably, with the inwardly-extending flanges B and B' at the top and bottom thereof and with the inwardly-extending longitudinal
50 ribs C, which serve, in connection with the flanges B and B', as guides for the sliding knives. The casing is open at both ends,

and at one end thereof I secure the stationary cutters or knives by means of the screws D, as shown in Figs. 2 and 3. The stationary
55 cutters or knives consist of the nut-knife E, which is preferably triangular-shaped, and of the bolt-knife F, which extends at right angles to the nut-knife E, and it is tapered or beveled, as shown in Figs. 2 and 6, so as
60 to have its cutting-face on one edge instead of in the middle. At the other end of the casing I arrange the plunger G, the extension G² of which works between the projections C of the casing, while its head is provided with
65 the curved recesses G', in which the cam-faces H of the operating-handles H' work, so that when the handles are moved up and down the plunger is forced in and out in order to operate the sliding knives.
70

H² represent yokes fitted on each side of the frame and joining the ends of the journals of the handles H', so as to prevent any danger of the frame spreading when a great
75 amount of pressure is brought to bear on the handles. Extending through the head of the plunger are the adjusting-screws I, which are connected to the sliding knives by means of the screws I', which work in the ends of the
80 knives and fit in the groove I², formed in the ends of the set-screws I. To further assist in regulating the movement of the cutting-knives, I provide one of the handles with a projection J² and the other with the set-screw J³, which bears against the projection when
85 the handles are brought together.

J and K represent the two sliding knives, which work between the ribs C and the flanges B and B'. They are preferably as wide as
90 the frame and each is provided with a cutting edge or face formed similar to the cutting edge of the stationary knife. The knife J, which is used for cutting nuts, (see Fig. 4,) has an outwardly-extending projection J⁴, which is for the purpose of cutting nuts of
95 extra thickness.

The operation of my device is as follows: The sliding movement of the knives is adjusted by means of the set-screws I and the
100 set-screws in the handle, so that when the handles are in the position shown in Fig. 1 the two knives will be in such a position that they will perform their work—that is to say, the knife K is adjusted so that when the

handles are brought together the edge thereof will be adjacent to the edge of the knife F, while the edge of the knife J will be near enough to the edge of the knife E to cut the
5 nut from the bolt without touching the bolt, as clearly shown in Fig. 4. When the proper adjustment is had, the bolt or nut is placed in the opening in the frame and between the knives, and the handles then operated to per-
10 form their work.

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

1. In a combined nut and bolt clipper, the
15 combination of the frame provided with the flanges at top and bottom, and with the ribs, stationary knives secured at one end of the frame, sliding knives at the other end of the frame and working between the flanges and

ribs, a plunger, adjustable connections be- 20
tween said plunger and knives, operating-
handles for said plunger, and adjusting means
between said handles, substantially as shown
and described.

2. In a combination nut and bolt clipper, 25
the combination of the frame, the stationary
knives located at one end, and having their
cutting-faces at right angles to each other,
the sliding knives at the other end of the
frame and having their cutting edges corre- 30
sponding with the cutting edges of the sta-
tionary knives, and suitable means for oper-
ating the knives, substantially as shown and
described.

GEORGE S. NOEL.

Witnesses:

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