

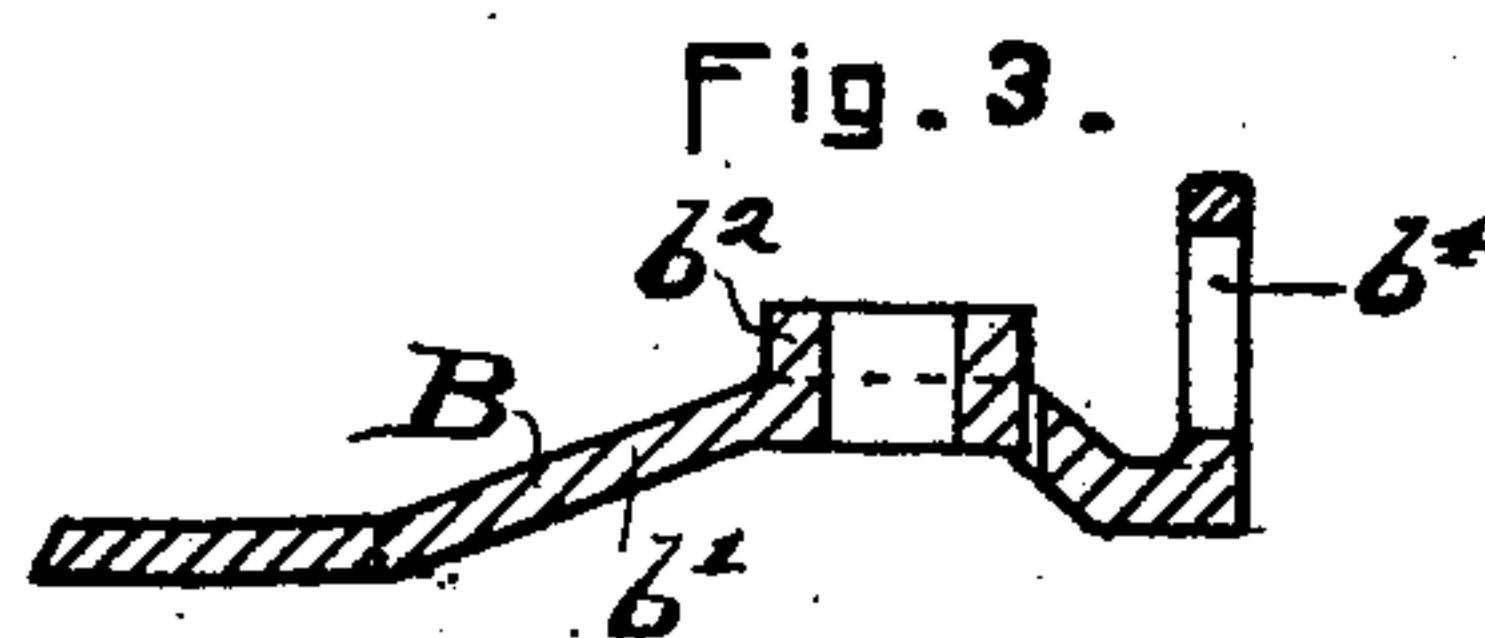
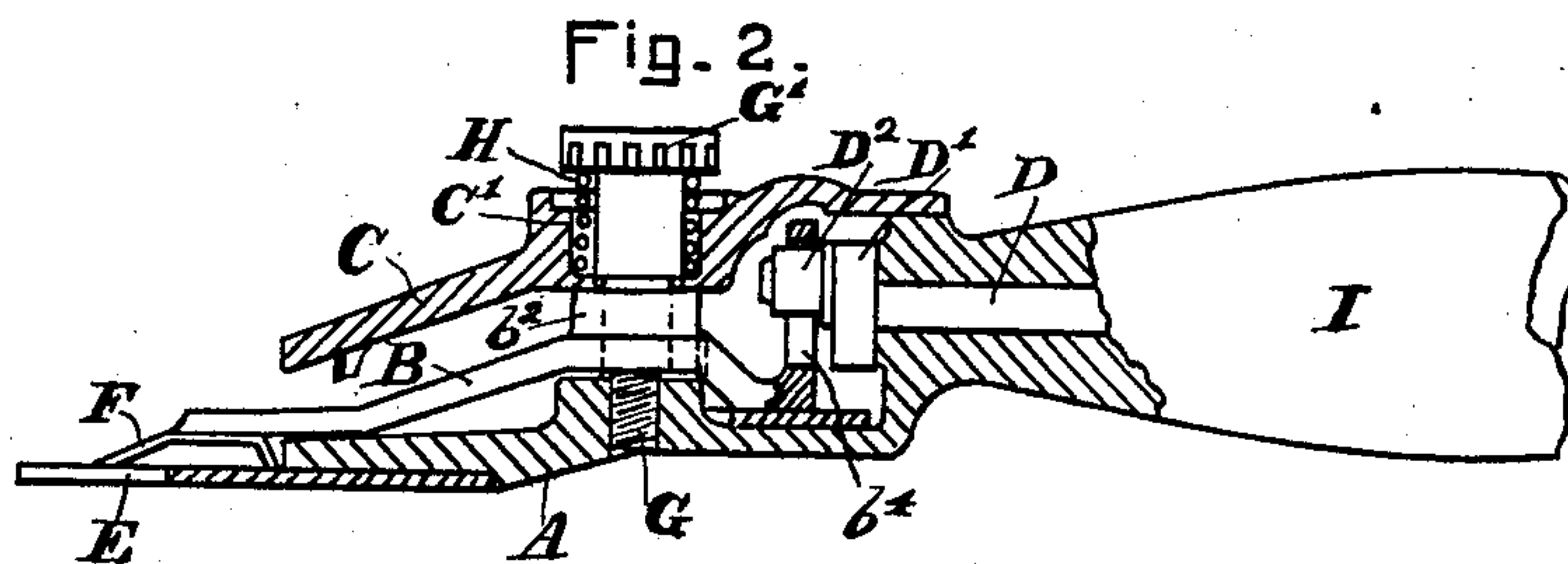
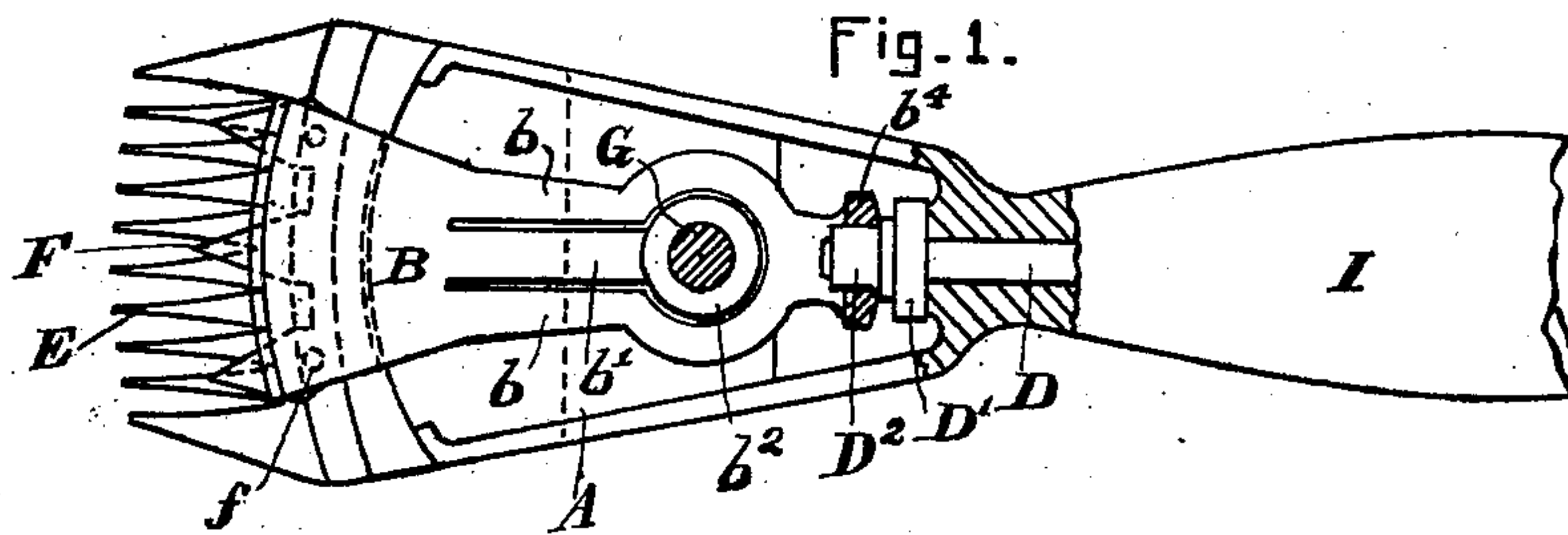
No. 678,161.

Patented July 9, 1901.

B. P. CLARK.  
ANIMAL SHEARS.

(Application filed Apr. 17, 1900.)

(No Model.)



Witnesses,  
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Inventor,  
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# UNITED STATES PATENT OFFICE.

BAINBRIDGE PERCY CLARK, OF CHOTEAU, MONTANA.

## ANIMAL-SHEARS.

SPECIFICATION forming part of Letters Patent No. 678,161, dated July 9, 1901.

Application filed April 17, 1900. Serial No. 13,179. (No model.)

*To all whom it may concern:*

Be it known that I, BAINBRIDGE PERCY CLARK, a citizen of the United States, and a resident of Choteau, in the county of Teton and State of Montana, have invented certain new and useful Improvements in Animal-Shears, of which the following is a full, clear, and exact description.

My invention relates to an improvement in animal-shears, and comprises certain novel features and combinations of parts, which will be hereinafter particularly pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional plan of my device, the section being taken just beneath the cap. Fig. 2 is a vertical section of the same, and Fig. 3 is a vertical section of the vibrating lever removed from the other parts.

In the present specification and drawings my device is described and shown in the manner now preferred by me, although it will be evident that the device may be varied from the construction herein shown without departing from the spirit of my invention.

The following is a description of the device as shown in the accompanying drawings:

The operating mechanism is inclosed within a casing formed by the main or casing member A, which is open at the top and closed when in use by means of a cap C. Within the chamber thus formed are placed the vibrating lever B and its operating mechanism, and at one end of the casing said lever projects and has the cutter F secured thereto and coöperating with the comb E, which is secured to the casing A. This comb is clearly shown in Fig. 1, and consists of a number of fingers, which have their upper side edges sharpened to form one-half of the cutting device. The cutter F is herein shown as having three fingers or teeth, which are moved in close contact with the upper surface of the comb and are sharpened, so as to cut hair or wool, which cuts between the fingers of the comb. A combined pivot and tension bolt G passes through the cap C and the vibrating lever and is screwed into the bottom of the casing A, as clearly shown in Fig. 2. The

cap is secured in place upon the casing by means of said bolt, which presses thereon through a spring H, which surrounds the bolt and engages the bolt-head and top of the vibrating lever. The vibrating lever B is pivoted upon the bolt G and is also held down, so as to hold the cutter and comb in close contact, by means of pressure applied through the medium of said bolt. This pressure is applied to the vibrating lever by means of an arm, which is provided with a sleeve or collar closely surrounding said bolt and connected with the lever at a point near the cutter or any convenient point between the pivot and said cutter F. This arm and collar may be made entirely independent of the vibrating lever B or, as herein shown, as a part of said lever. This lever, as herein shown, is provided with two longitudinal slits arranged at each side of its center line and dividing this portion of the lever into a central arm  $b'$  and two outer arms  $b$ . The central arm  $b'$  carries the collar or sleeve  $b^2$ , which closely fits about the combined pivot and tension bolt G. As herein shown, the outer arms  $b$  extend about the collar  $b^2$  to the rear end, being thus held out of direct contact with the pivot-bolt G. With this construction the pivotal support of the vibrating lever is through the arm  $b'$ . It is very evident, however, that the vibrating lever B may be directly pivoted upon the bolt G and the arm  $b'$  and collar  $b^2$  be made as a separate member, which is either fixedly secured to the vibrating lever B or has its outer end bearing upon the top of the lever B. The object of this particular construction is to transfer the pressure upon said collar  $b^2$  through the arm  $e'$  to a point upon the vibrating lever nearer the cutter than if the pressure were applied directly to the lever at its pivot-point. As the collar  $b^2$  snugly fits upon the pivot-bolt, pressure applied thereto lengthwise of the bolt will be transferred through the arm  $b'$  to the vibrating lever B at the point where the two unite. By this means the pressure is applied nearer the cutter, and as a consequence thereof the device will work more satisfactorily than if the pressure were applied directly at the pivot-point.

The cap C is herein shown as provided with a recess or socket C', surrounding the outer portion of the pivot-bolt, and contains a coiled



spring H, which bears upon the lower portion of said socket and upon the under surface G' of said bolt. The upper end surface of the collar  $b^2$  engages with the lower surface of the cap, and the pressure is transferred from the bolt to said collar  $b^2$  through the spring H and cap C. The lever B is vibrated by any usual mechanism. The mechanism herein shown consists of a rotating shaft D, which is journaled in the handle I and is provided at one end with a crank-disk D' and a crank-pin D<sup>2</sup>, the latter lying within a slot  $b^4$ , formed in an upturned portion of the lever B at its rear or inner end.

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

1. In animal-shears the combination of a combined pivot and tension bolt and a vibrating lever pivoted thereon, and having an arm extending from the point removed from its pivot and provided with a sleeve or collar closely surrounding the pivot-bolt, and means for applying pressure to said collar, substantially as described.

2. In animal-shears the combination with the cutters, and a pivot-bolt, of a vibrating lever carrying one of said cutters, an arm extending from the cutter-engaging end of said lever and having a collar or sleeve fitting about the pivot-bolt, and means for applying pressure to said collar or sleeve in the direction of its axis, substantially as described.

3. In animal-shears, the combination with the cutters, a vibrating lever carrying one of said cutters, a pivot-bolt therefor, an arm

having a collar or sleeve thereon surrounding said pivot-bolt and its outer end engaging the cutter-carrying end of the vibrating lever, and means for applying pressure to said collar lengthwise the bolt, substantially as described.

4. In animal-shears the combination with the cutters, a vibrating lever carrying one of said cutters, a pivot-bolt therefor, an arm having a collar or sleeve thereon surrounding said pivot-bolt and its outer end engaging the cutter-carrying end of the vibrating lever, a spring acting upon said collar and thereby to apply pressure upon the vibrating lever, and means for regulating the tension of said spring, substantially as described.

5. Animal-shears, comprising a casing having a comb secured thereto, a vibrating lever, a detachable cutter carried by said lever, a combined tension and pivot bolt screwing into the casing, an arm having a collar or sleeve at one end surrounding said bolt and its other end engaging the vibrating lever to hold the cutter down, a casing-cap beneath the head of the said bolt and engaging the sleeve upon said arm, and a spring between the bolt-head and said cap, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of the two subscribing witnesses.

BAINBRIDGE PERCY CLARK.

Witnesses:

H. L. REYNOLDS,

CHARLES J. RATHJEN.