

No. 661,958.

Patented Nov. 20, 1900.

H. A. DECKER.

SHEARS.

(Application filed May 29, 1900.)

(No Model.)

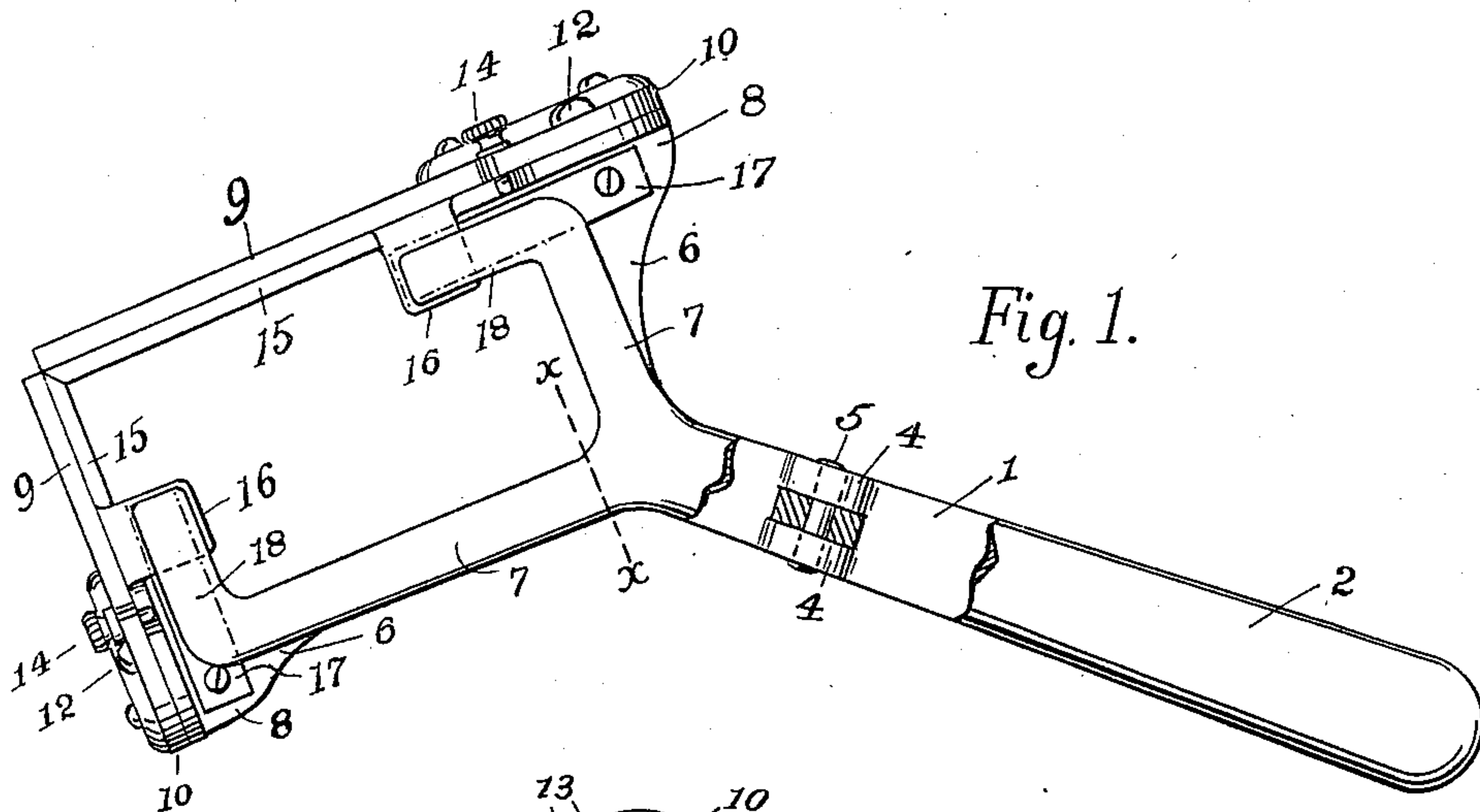


Fig. 1.

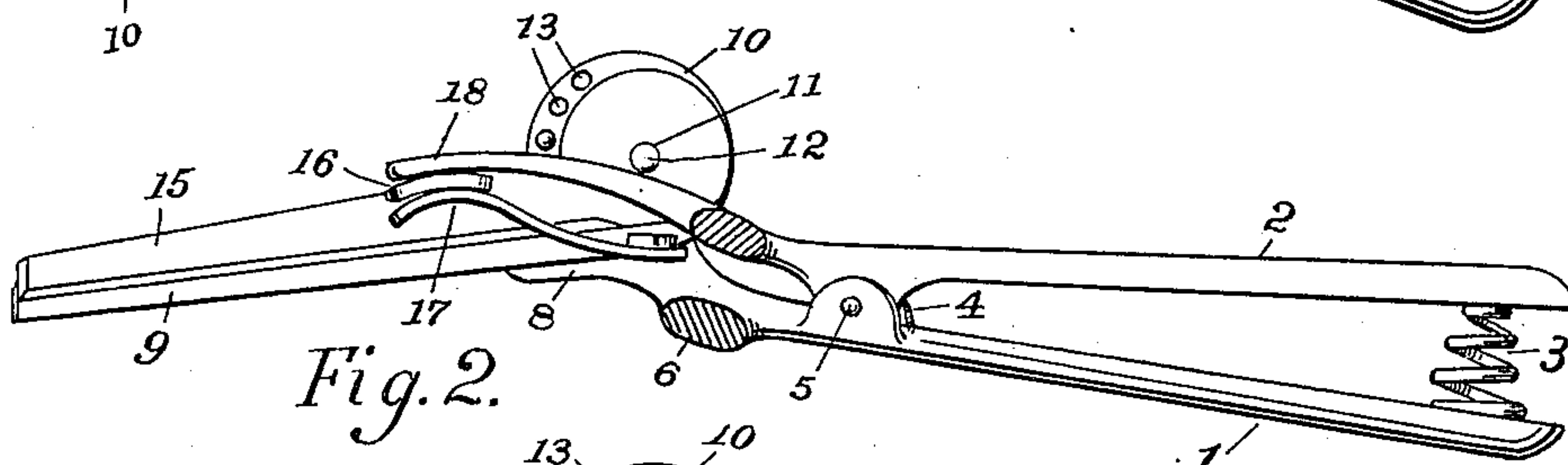


Fig. 2.

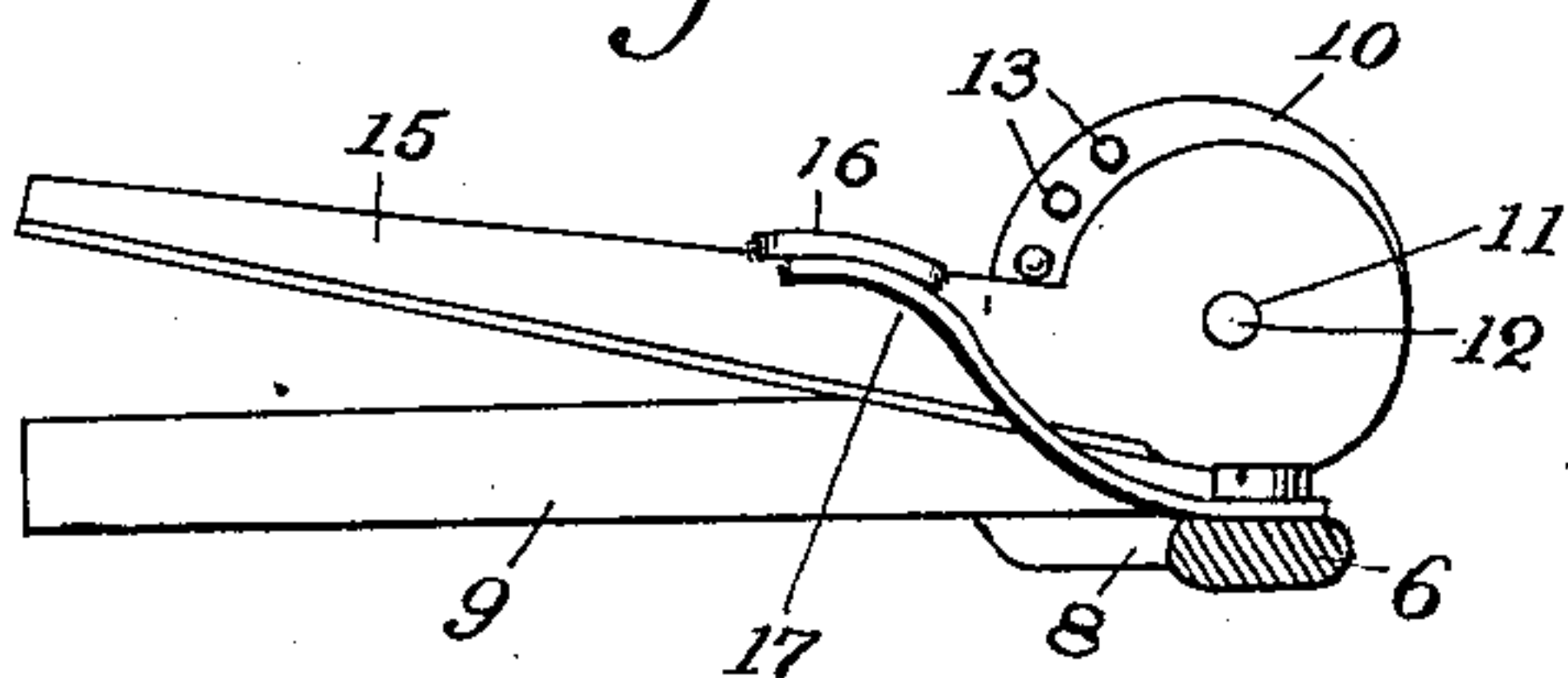


Fig. 3.

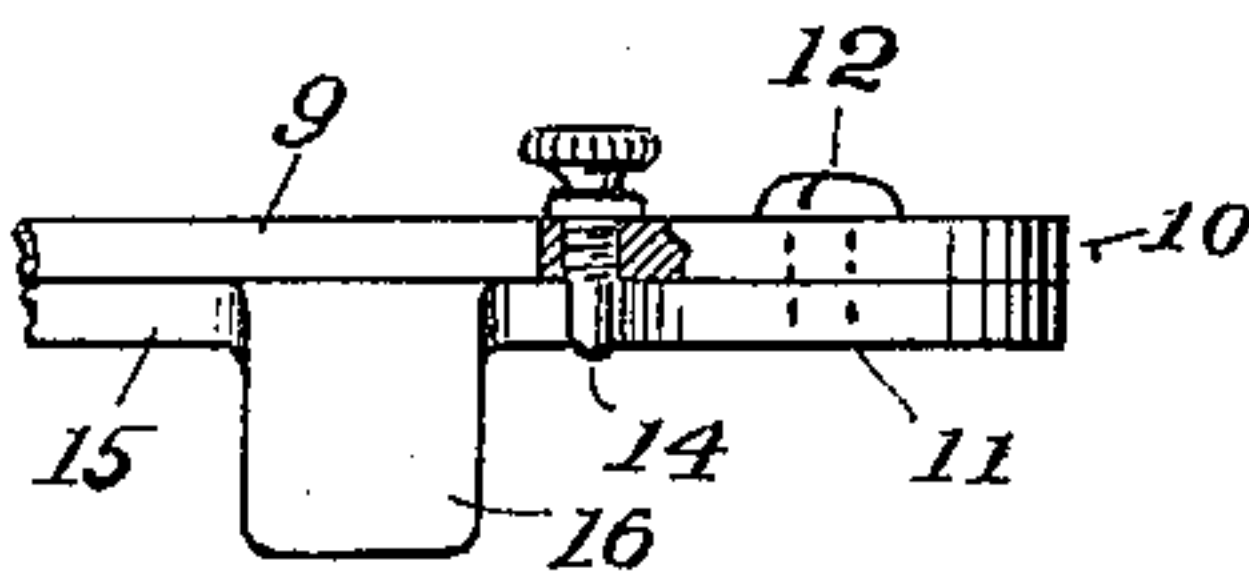


Fig. 5.

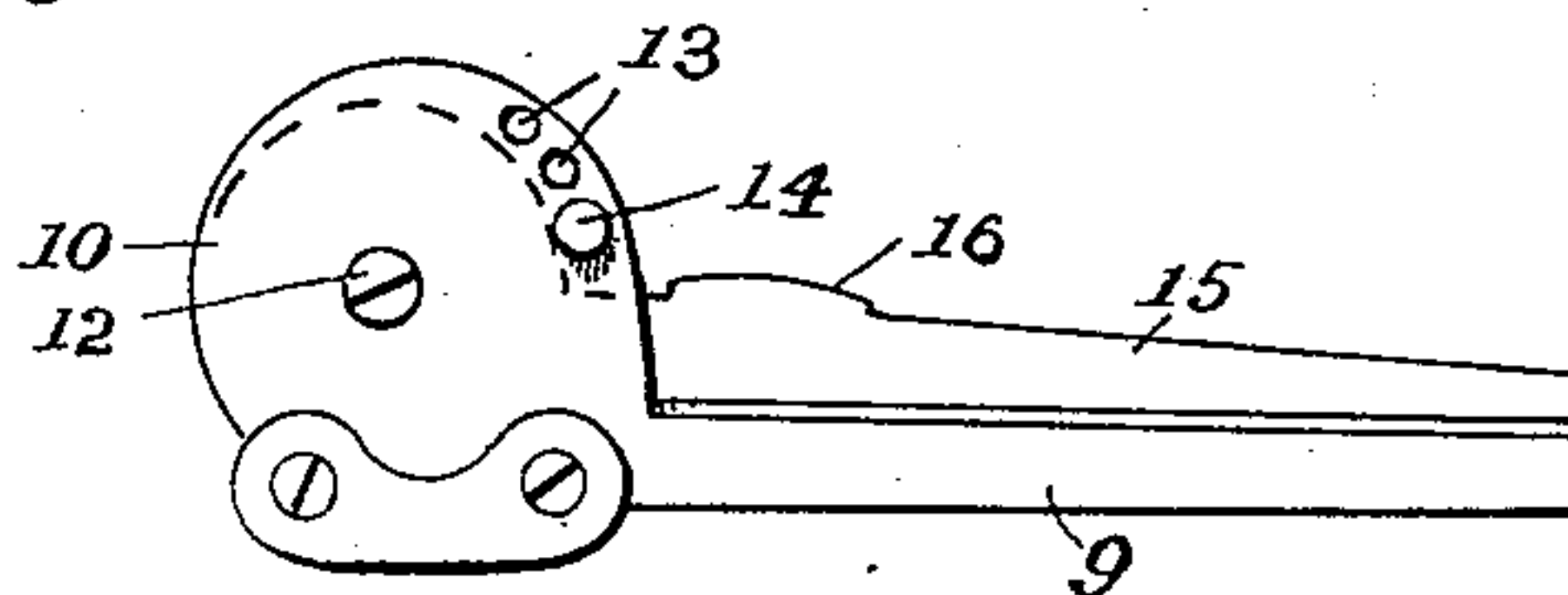


Fig. 4.

WITNESSES:

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HENRY A. DECKER, OF NEW YORK, N. Y.

SHEARS.

SPECIFICATION forming part of Letters Patent No. 661,958, dated November 20, 1900.

Application filed May 29, 1900. Serial No. 18,372. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. DECKER, a citizen of the United States of America, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Shears, of which the following is a specification.

My invention relates to improvements in shears; and the main object of my invention is the provision of a shears whose blades are arranged as two simultaneous right-angled edges—that is, a shears especially adapted for cutting coupons, samples of paper, fabrics, and the like—the said right-angled edges being cut by a single operation of the handles.

Another object of my invention is the provision of a shears of this kind which is extremely simple, durable, and cheap, as well as very useful and practical.

To attain the desired objects, my invention consists of a shears embodying novel features of construction and combination of parts, substantially as disclosed herein.

In the drawings, Figure 1 is a top plan view of my shears, having a portion of the handles shown in section. Fig. 2 is a side elevation thereof with a cross-section taken on line xx of Fig. 1. Fig. 3 is a side elevation of two of the cutting-blades of the shears. Fig. 4 is a similar view of the same, taken from the opposite side and with the blades closed. Fig. 5 is a detail view of the gage for regulating the length of the cut.

Referring by numeral to the drawings, the numerals 1 and 2 designate the handles of the shears, said handles being normally held apart by means of the coiled spring 3 and each further provided with the lugs 4, which interlock and are held together by means of the pin 5 to form a pivot or hinge for the handles. These handles have the arms 6 and 7, the pair 6 being provided with the plates 8, to which are secured the shear-blades 9, having the disks 10 at their pivotal end provided with the perforation 11 for the passage of a rivet or screw 12, on which the blade articulates, and with a series of perforations 13 near its periphery for the retention of a screw or taper pin 14 to limit the movement of the upper movable blades 15, which I prefer to place upon the inner side. These upper blades are provided with an integral member

or lip 16 at right angles to the upper edge of the blades. Secured to the plates 8 by means of a screw are the upwardly-extending flat springs 17, whose free ends are adapted to press upon the under side of the lips 16 to raise the movable blades when the handles are pressed upon. Formed upon and integral with the arms 7 of the other handle are the upwardly-curved elbows 18, which are adapted to have their free ends pass above and contact the upper sides of the lips 16 and be so operated when the handles are pressed together as to force the movable blade upward ready for cutting the article, and then the handles are released and the coiled spring by reason of its vastly superior elastic pressure returns the blades to their normal position.

From this description, taken in connection with the drawings, the operation of my improved shears is readily understood and its numerous advantages fully appreciated; but the operation, briefly stated, is as follows: When it is desired to cut coupons or the like, the handles are depressed. This opens both of the movable shears to the full limit, which is regulated by the gage-pin and perforations. If a longer or shorter cut is desired on either of the blades, the gage-pin is removed and placed in the opening suited to regulate the cut, each blade opening independent of the other and independent of the handle or arms, for the reason that when a blade has reached its full opening limit its upper edge near the disk engages the pin and stops further upward movement of that blade, though the other blade may continue to open until it has reached its limit. The shears are then placed in such a position on the coupon that both of the cutting edges will be at the cut-off line or space when the hand is opened and the handles released, the coiled spring causing the handles to spread apart, thus advancing the elbows, which press downward upon the extending lips of the movable shears until the two points of the shears meet and the coupon or other cutting is severed from the piece.

The lower blades may be made integral with the handle; but I prefer to make them separately for the purposes of sharpening and manufacture; neither do I wish to confine

myself to the precise manner of regulating the length of the cut.

What I claim as my invention, and desire to secure by Letters Patent, is—

- 5 1. A shears, consisting of a pair of handles, one of which carries two pairs of cutting-blades at right angles to each other, and the other of which carries means for operating the blades.
- 10 2. A shears, consisting of a pair of handles provided each with a pair of right-angled arms, a stationary blade carried by each arm of one handle forming with the arms a rec-
15 tangle, a movable blade pivoted to said stationary blades, means to raise said movable blades when the handles are pressed, and arms or elbows carried by the arms of the other handle to operate said movable blades.
- 20 3. A shears, consisting of a pair of handles provided each with a pair of right-angled arms, stationary blades carried by the arms of one handle, movable blades pivoted to said stationary blades, springs to raise said mov-
25 able blades when the handles are pressed, a gage carried by said stationary blades to limit the opening of the movable blades, and means carried by the other handle to close the mov-
30 able blades.
4. In combination with a shears, of two
30 pairs of cutting-blades arranged at right angles to each other each provided with a disk,

a series of perforations formed in the disks of two blades, and means to engage the perforations to limit the movement of the other blades.

5. A shears, consisting of a pair of handles, a pair of arms carried by each handle, two pairs of independently-movable blades carried by the arms of one handle, means for regulating the length of the cut of the blades, 40 means to raise the movable blades when the handles are pressed, and elbows carried by the other handle to operate the blades.

6. A shears, consisting of a pair of handles, a pair of arms at right angles to each other 45 carried by one handle, a stationary blade carried by each of the right-angled arms, a movable blade carried by each of the arms, flat springs adapted to contact said movable blades so as to open the same when the han- 50 dles are pressed, elbows at right angles to each other carried by the other handle, and a coiled spring located between the handles so as to cause the elbows to force the mov- 55 able blades closed when the handles are released.

Signed by me at New York city, New York, this 26th day of May, 1900.

HENRY A. DECKER.

Witnesses:

FRANKLIN BROWN,
CLARENCE G. MILLER.