C. J. PILLING.

CAPONIZING INSTRUMENT.

APPLICATION FILED AUG. 21, 1909.

962,586. Patented June 28, 1910.

Fig. 1.

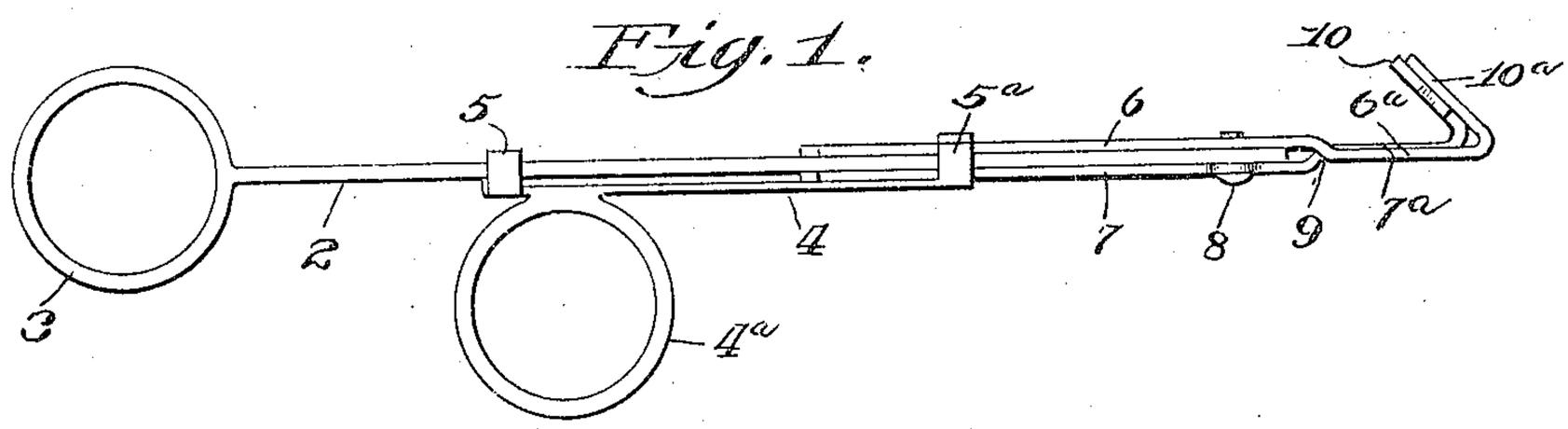


Fig. 2.

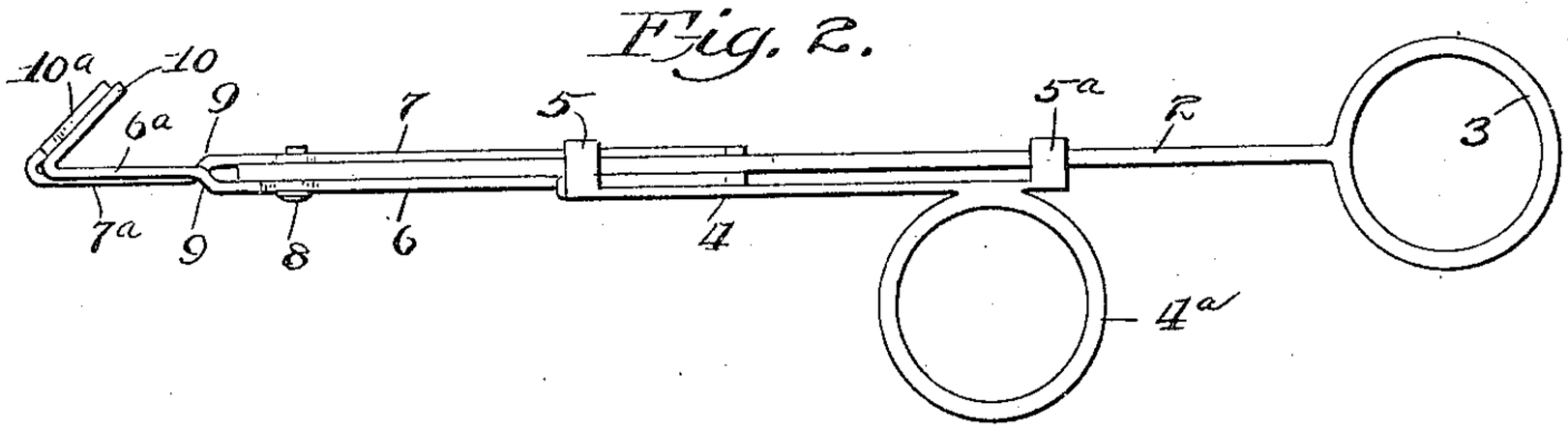


Fig. 3.

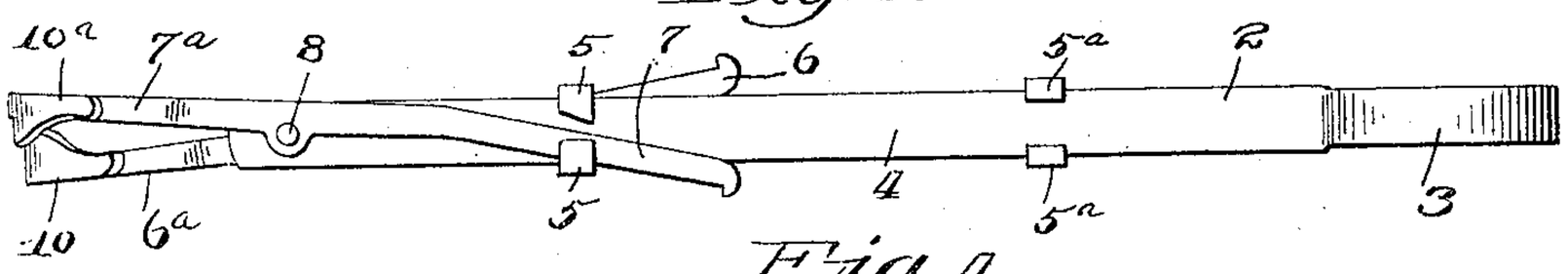


Fig. 4.

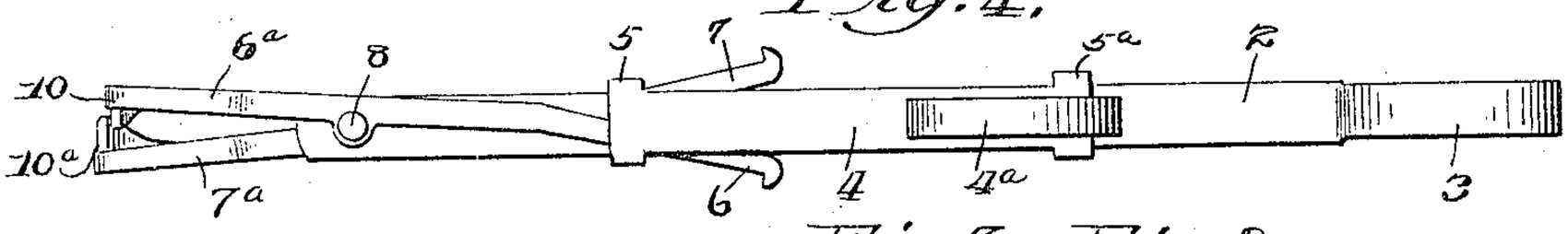


Fig. 7.

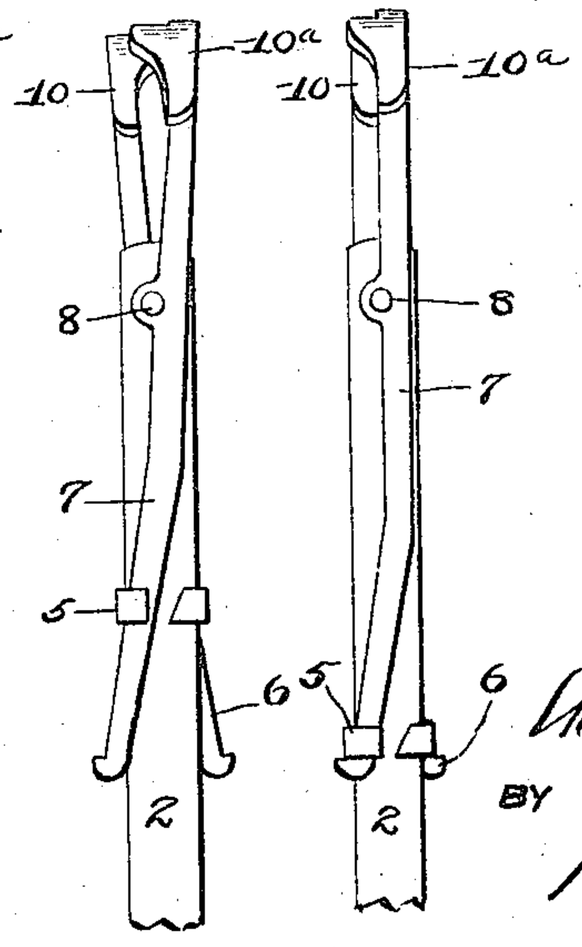


Fig. 8.

Fig. 6.

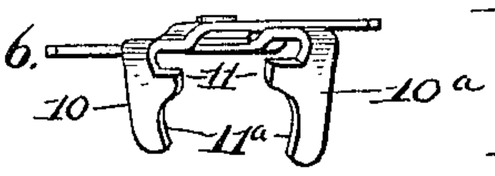
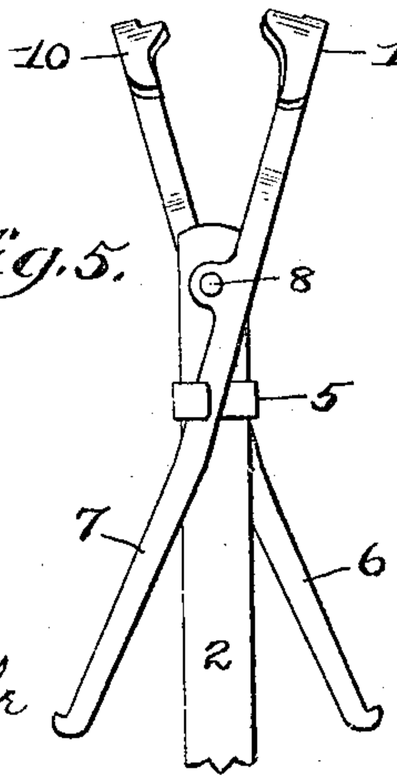


Fig. 5.



WITNESSES

A. M. Biddle

F. H. Gamble

INVENTOR

Charles J. Pilling

BY

H. V. Heuton

ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES J. PILLING, OF PHILADELPHIA, PENNSYLVANIA.

CAPONIZING INSTRUMENT.

962,586. Specification of Letters Patent. Patented June 28, 1910.

Application filed August 21, 1909. Serial No. 514,041.

To all whom it may concern:

Be it known that I, CHARLES J. PILLING, a citizen of the United States, residing in the city of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Caponizing Instruments, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to instruments for caponizing, and has for its several objects to provide an easily operated and efficient device for the purpose, having the function as well of grasping the parts to be operated on as of sectioning or cutting them when so grasped; and moreover capable of being readily operated by one hand leaving the other free to hold the bird.

To these ends my invention consists of an instrument comprising the elements constructed as hereinafter described, combined and arranged to effect the functions recited; said combination of elements embodying the principle of a pair of blade levers pivotally mounted, independently, on an operating holder, with sliding means to actuate the lever blades, the latter being constructed and combined to effect a shear-like cut of the cord due to their particular form and relative arrangement hereinafter described.

In the drawings illustrating my invention, Figure 1 is a side elevation, from one side of the instrument; Fig. 2 a like view from the opposite side; Fig. 3 is a plan view thereof, and Fig. 4 a like view from the basal side. Fig. 5 is an elevation in position corresponding to that of Fig. 3, with the blade levers distended fully, and the lower part of the operating handle broken away. Fig. 6 is an end view of the blades and their levers; Figs. 7 and 8 are elevations corresponding in position to that of Fig. 3, showing respectively the blades in initial operative position and in fully-operated cutting position.

The instrument consists primarily of an operating holder composed of two parts, one of which is slidingly mounted upon the other, and each of which is independently supported and operated by the fingers of the operator. One of these parts or members, which is the longer of the two, is a metallic rod 2, preferably flat and narrow in width, and with straight parallel edges, and terminating at its lower end in a finger hold 3, preferably in the form of a ring. The other member or part 4 is of like character so far as described, and with finger hold 4^a; it is about half the length of the other, and has flanges 5, 5^a proceeding from its opposite sides, at each of its terminal ends, these flanges being bent around the body portion of the first described member; in consequence of which construction, the finger and thumb of the operator can, respectively, be inserted in the finger holds of the two members, and the shorter member be readily slid upon the longer member.

A pair of blade-levers 6 and 7 carrying blades 6^a and 7^a are pivotally mounted, rearward of the blade portion, one on each opposite side of the long member 2 of the holder, the pivoting being effected by a pin 8 which passes through both levers 6 and 7 and through the interposed holder member 2. Below their said pivotal bearing the blade-levers are embraced by the bent flanges 5 at the upper terminal end of the holder member 2, the levers being given a slight outward curvature about midway of their length, in consequence of which a sliding movement of the holder member 4 on member 2 will, by means of the engaging flanges 5 actuate said levers to spread them apart or bring them together, both at their lower ends and at their blade ends now to be described.

Each of the pair of blades is formed integral with its carrying and actuating lever, and each is formed by an inward bend, as at 9, 9, in the reverse direction relatively, so as to bring the straight or body portions 6^a 7^a of the two blades in the same lateral plane, hence their edges abut when brought together in the act of closing. The free ends 10, 10^a of the blades are bent to one side and then in a downward incline, as seen in side elevation, to form, collectively, a grasping hook, but such bending is so effected that the portion 10 of one blade is slightly shorter than the like portion of the other blade, in order that when brought together on the fully closed position the extremity of the bent end 10 of one blade will pass to some extent under the extremity of the bent end 10^a of the other blade and effect a shear-like cut of any cord or tissue held between them. The coinciding sides or lateral edges of these blade ends are not sharpened, for no cutting is desired until after the blade ends grasp the cord or tis-

sue, hence the above described relative arrangement of them to effect a cutting by a shear-like contact. This will be clearly understood from Figs. 6 and 7. Another important feature of construction of the hook ends 10, 10[a] of the blades can be best understood by reference to the end view Fig. 6, from which it will be seen that the lateral inner sides of the blade ends have each a projecting central lip 11, square on its upper surface and narrowing in curved direction downward, as at 11[a], to the point of the hook, hence providing a curved cutting surface, and the lip 11 of one member passing over the lip 11 of the other member, while the coinciding straight sides 6[a], 7[a], (which are bent into the same lateral plane as before stated) act as stops when they abut, which is when the cutting action is completed as seen in Fig. 8.

To those familiar with caponizing the operation of the instrument, on the fowl, will be readily understood; hence it is sufficient to say only that the testicle of the bird is projected as usual and then the cord or tissue rearward thereof is grasped by the pair of curved jaws or hooks 10, 10[a], the operator opening them for the purpose by a sliding movement of the member 4, of the operating holder in an upward or outward direction on the member 2 thereof; the best position of the blade jaws being as shown in Fig. 7. Having grasped the indicated parts of the bird, a reverse sliding movement is given to the members 2 and 4, bringing the curved cutting edges of the hooks together, with a relatively shear-like movement, and cutting off the testicle without the necessity as at present, of straining and pulling out the cord and tissues, and effecting the castration with the greatest facility and with the least injury to the bird.

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

1. A caponizing instrument comprising an operating handle consisting of two relatively sliding members, a pair of levers pivotally mounted on opposite sides of one of said handle members, connecting actuating means between said pivoted levers and the other of said sliding members, and hook-shaped blades on each of said levers constructed and combined to operate as a grasping hook in initial position and as cutting shears when brought into closed position.

2. A caponizing instrument having an operating handle consisting of two members of unequal length, with terminal finger holds, the shorter member being mounted slidingly on the longer member, a pair of levers pivotally mounted at the terminal end and on opposite sides of said longer member, connecting actuating means between the shorter of said handle members and said levers adapted to rock the latter on their pivot bearing in opposite directions, and hook-shaped shear blades on the ends of said levers adapted to be brought into grasping and cutting coincidence successively when said levers are actuated.

3. A caponizing instrument comprising a suitable operating handle, a pair of levers pivotally mounted thereon and adapted to be actuated thereby, said levers having integral terminal blades bent inwardly from the lever body to bring them into the same lateral plane and having hook-like ends arranged to vibrate in different horizontal planes but in shear-like coincidence.

4. A caponizing instrument comprising a suitable operating handle, with a pair of levers pivotally mounted thereon and adapted to be actuated thereby, said levers carrying integral terminal blades bent into lateral coincidence and having hook-like jaws adapted to be brought into shear-like coincidence, said jaws having outwardly curved cutting faces adapted to partially overlap when brought together.

5. A caponizing instrument comprising a handle consisting of two members of unequal length, each with terminal finger-holds, the shorter member being mounted slidingly on the longer member, in combination with a pair of grasping levers pivotally mounted on opposite sides of the longer member of the handle and having outwardly curved terminal ends, with connecting actuating means between the shorter of said handle members and the curved ends of said levers adapted to rock them on their pivot bearing in opposite directions.

6. In a caponizing instrument a handle comprising a supporting-member with a terminal looped finger hold, a relatively shorter member also with terminal looped finger hold, and having upper and lower flanges bent to slidingly engage the longer supporting member, in combination with a pair of vibratable levers pivotally mounted on opposite sides of the supporting member of the handle, said levers having grasping devices at one end and with their opposite actuating terminal ends outwardly curved, said sliding member of the handle having one of its bent flanges adapted to engage said curved ends of the levers to actuate them.

In testimony whereof, I have hereunto affixed my signature this sixteenth day of August A. D. 1909.

CHARLES J. PILLING.

Witnesses:
A. M. Biddle,
R. A. Dunlap.