(No Model.)

J. SPARENBURG.

CASTRATING INSTRUMENT.

No. 558,668. Patented Apr. 21, 1896.

Fig. 1.

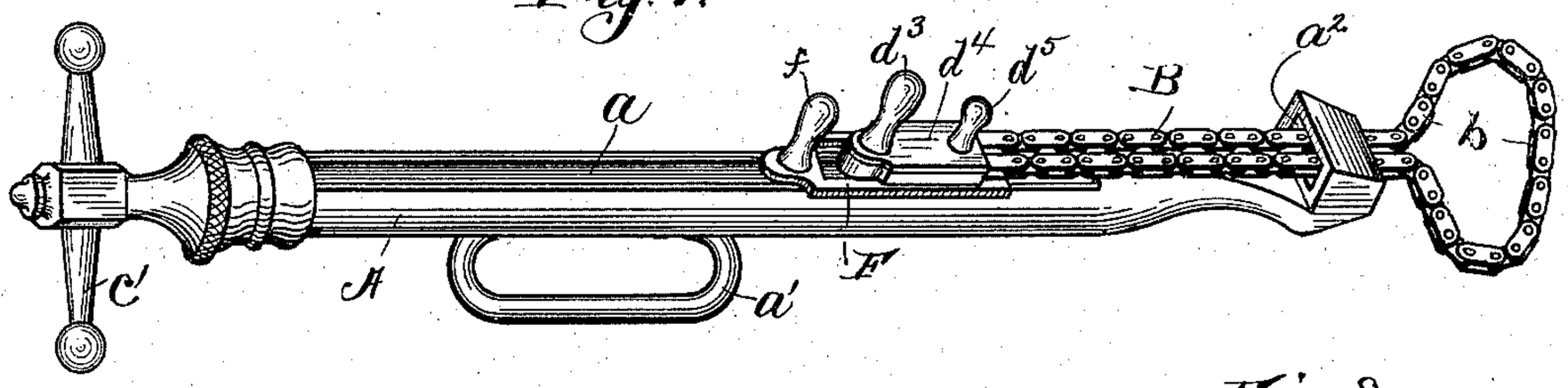


Fig. 2.

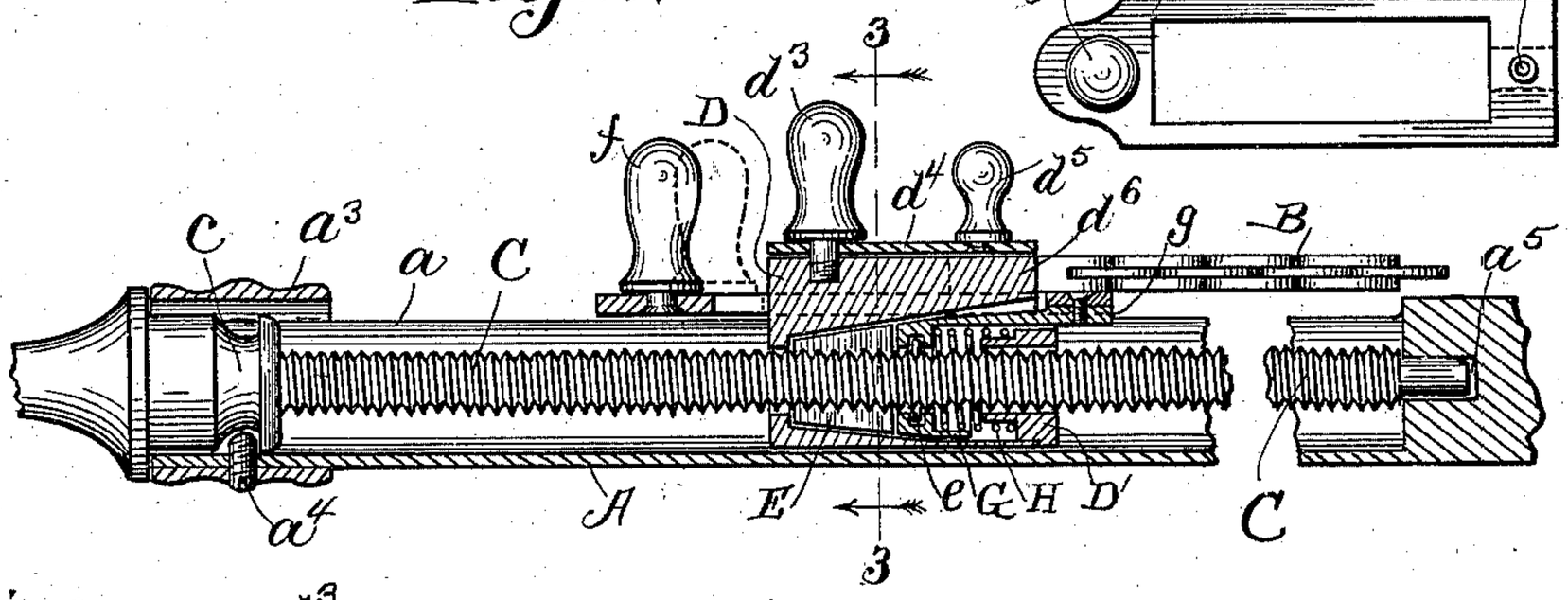


Fig. 8.

Fig. 3.

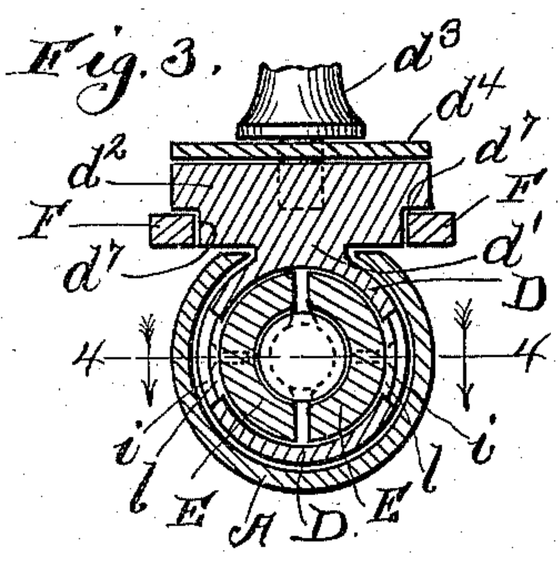


Fig. 4.

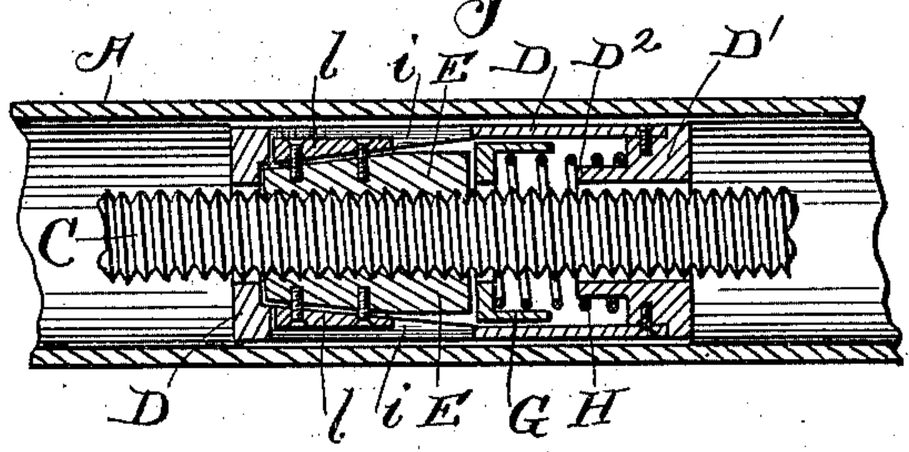


Fig. 5.

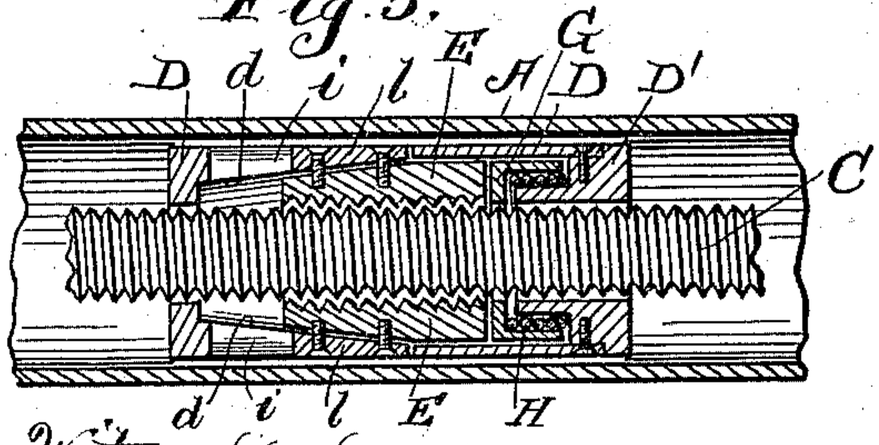


Fig. 7.

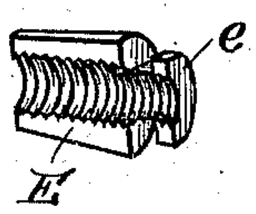
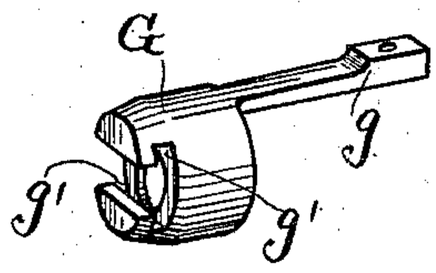


Fig. 6.



Witnesses:
R. J. Jacker
E. A. Duggan.

Inventor:
John Sparenburg.
By Chas. C. Tillman Atty.

UNITED STATES PATENT OFFICE.

JOHN SPARENBURG, OF CHICAGO, ILLINOIS.

CASTRATING INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 558,668, dated April 21, 1896.

Application filed July 25, 1895. Serial No. 557,082. (No model.)

To all whom it may concern:

Be it known that I, JOHN SPARENBURG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Castrating Instruments, of which the following is a specification.

This invention relates to improvements in a device to be used for castrating horses and other animals; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The objects of my invention are, first, to provide a castrating instrument or clamping device which shall be simple and inexpensive in construction, strong and durable, yet effective in operation, and, second, an instrument by means of which the necessary binding or clamping of the scrotum above the testicles may be done in a more easy, rapid, and effective manner than is accomplished by the use of the instruments now in general use.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a perspective view of the castrating instrument as it appears when ready for use, showing the clamping-chain in position to receive the scrotum. Fig. 2 is a longitudinal sectional view of a portion of the instrument, showing it foreshortened for convenience of illustration. Fig. 3 is a cross-sectional view taken on line 3 3 of Fig. 2. Fig. 4 is an enlarged longitudinal sectional view of a portion of the instrument, taken on line 4 4 of Fig. 3, looking in the direction indicated by the arrows. Fig. 5 is a like view taken on the same line, but showing the clamping ends disengaged from the screw-threaded rod. Fig. 6 is a perspective view of the sliding thimble. Fig. 7 is a like view of one of the clamping-nuts, and Fig. 8 is a plan view of the movable plate detached from the instrument.

Similar letters refer to like parts throughout the different views of the drawings.

A represents the main stem of my instrument, which is made of any suitable size and material, but preferably of metal, and is formed with a longitudinal slot a, which extends almost its entire length, and is for the operation and guidance of the adjusting mechanism for the clamping-chain B, as will be presently and fully explained. The stem or tube A is provided with a handpiece a', and at one of its ends with an opening a^2, through which the loop of the chain B is passed and operates. The other end of the tube or stem A is provided with a collar a^3, through which is passed a screw a^4 to engage an annular groove c on the screw-threaded rod C, the outer end of which rod is provided with a handle c' for turning the same.

The inner end of the rod C is socketed in the stem or tubular piece A, as shown at a^5, thus allowing the said rod to be turned in either direction, the screw a^4, engaging with the annular groove c, preventing its longitudinal displacement. Within the tubular stem A is located a sliding piece D, which is formed with a conical-shaped hollow d for the reception and operation of the screw-threaded rod and the clamping-nuts E. The movable or sliding piece D is formed with a neck d', to fit within the slot a of the stem, and at its upper part with a block d^2, in which is fitted a thumb-piece d^3, which pivotally secures on the top of the block d^2 a plate d^4, which is provided with a thumb-pin d^5 for turning the same. To the upper surface of the block d^2 is detachably connected in any suitable manner the chain B, as at d^6 in Fig. 2 of the drawings, in order to allow of its being removed at pleasure. The plate d^4 is pivoted in the block d^2 by means of the thumb-pin d^3, as before stated. The lower portion of the block d^2 is provided with a recess d^7 around its perimeter to receive the plate F, which is slotted, as shown in Figs. 1, 3, and 8 of the drawings, and is provided at one of its ends with a thumb-pin f and at its other end with an opening f' for a screw for securing the arm g of the collar G thereto.

As before stated, the sliding or movable piece D is formed with a hollow portion, a part of which is cylindrical and the other part conical in shape. In the end of the cylindrical portion of the piece D is secured a collar D′, which has an internal flange or exten-

sion D^2, which projects over the screw-threaded rod C and serves as a support for one end of the spring H, the other end of which spring is secured within the hollow of the collar G, as is clearly shown in Figs. 2, 4, and 5 of the drawings. That portion of the sliding piece D having the conical-shaped hollow is formed with two slots *i*, which are diametrically opposite each other, and are beveled at their edges, as shown in Fig. 3 of the drawings, and also partake of the conical or flaring shape of the hollow. These slots are for the reception and operation of the sliding pieces *l*, which are united to the split or clamping nuts E, which are internally screw-threaded to engage the rod C. The free portion of the collar G is formed with a transverse recess *g'* to receive the projections *e* on the adjacent ends of the split or clamping nuts E, which nuts are somewhat conical in shape, as shown. The chain B is composed of short links *b* to provide a clamp which will present roughened edges to the arteries and thereby prevent the loss of blood and obviate the necessity of ligating the same, as is well known.

From the foregoing and by reference to the drawings it will be seen and readily understood that by forcing the pin *f* on the plate F to the position indicated by dotted lines in Fig. 2 of the drawings the collar G, through its connecting-arm *g* with the plate F, will draw the split or clamping nuts E toward the cylindrical portion of the hollow of the piece D, and by reason of the pieces *l*, operating in the slots *i*, will disengage the clamping-screws from the screw-threaded rod C, and will also depress the spring H, as shown in Fig. 5, so that when the parts are in the position illustrated in the last-named figure the movable piece D may be slid to any desired position on the tube or stem, thus quickly contracting or drawing the chain around the scrotum of the animal, when it can be more tightly fitted thereon by turning the screw-threaded rod C by means of the handle *c'*, the spring H causing the collar G on the split or clamping nuts E to be forced into the contracted portion of the conical hollow *d*, thereby causing the split nuts to engage the screw-threaded rod, as is apparent.

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

1. The combination with a slotted tube having an opening near one of its ends for a binding device, of a screw-threaded rod located in said tube and having a handle to turn the same, the movable piece D, formed with hollow partly cylindrical and partly conical and beveled slots opening into said hollow, and the block d^2, provided with a thumb-pin d^3, for moving the same, the slotted plate F, having the thumb-pin *f*, and located around the movable block d^2, the split or clamping nuts E, located within the hollow of the movable piece, the sliding pieces L, secured to said clamps and operating in the slots *i*, the spring-actuated collar G, connected to the plate F, and engaging the split nuts E, and the binding-chain B, connected to the upper part of the movable piece D, and operating within the opening in the tube or main stem, all constructed, arranged and operating substantially as described.

2. The combination with a movable piece D, formed with hollow partly cylindrical and partly conical and beveled slots opening into said hollow, and the block d^2, provided with a projection for moving the same, the slotted plate F, located around the movable block d^2, the split or clamping nuts E, located within the hollow of the movable piece, the sliding pieces *l*, secured to said clamps and operating in the slots *i*, the spring-actuated collar G, connected to the plate F, and engaging the split nuts E, and the rod passing through the movable piece D, clamps E, and collar G, all constructed, arranged and operating substantially as described.

JOHN SPARENBURG.

Witnesses:
CHAS. C. TILLMAN,
E. A. DUGGAN.