

(No Model.)

A. A. WALKER.
VETERINARY MOUTH SPECULUM.

No. 574,591.

Patented Jan. 5, 1897.

Fig. 1.

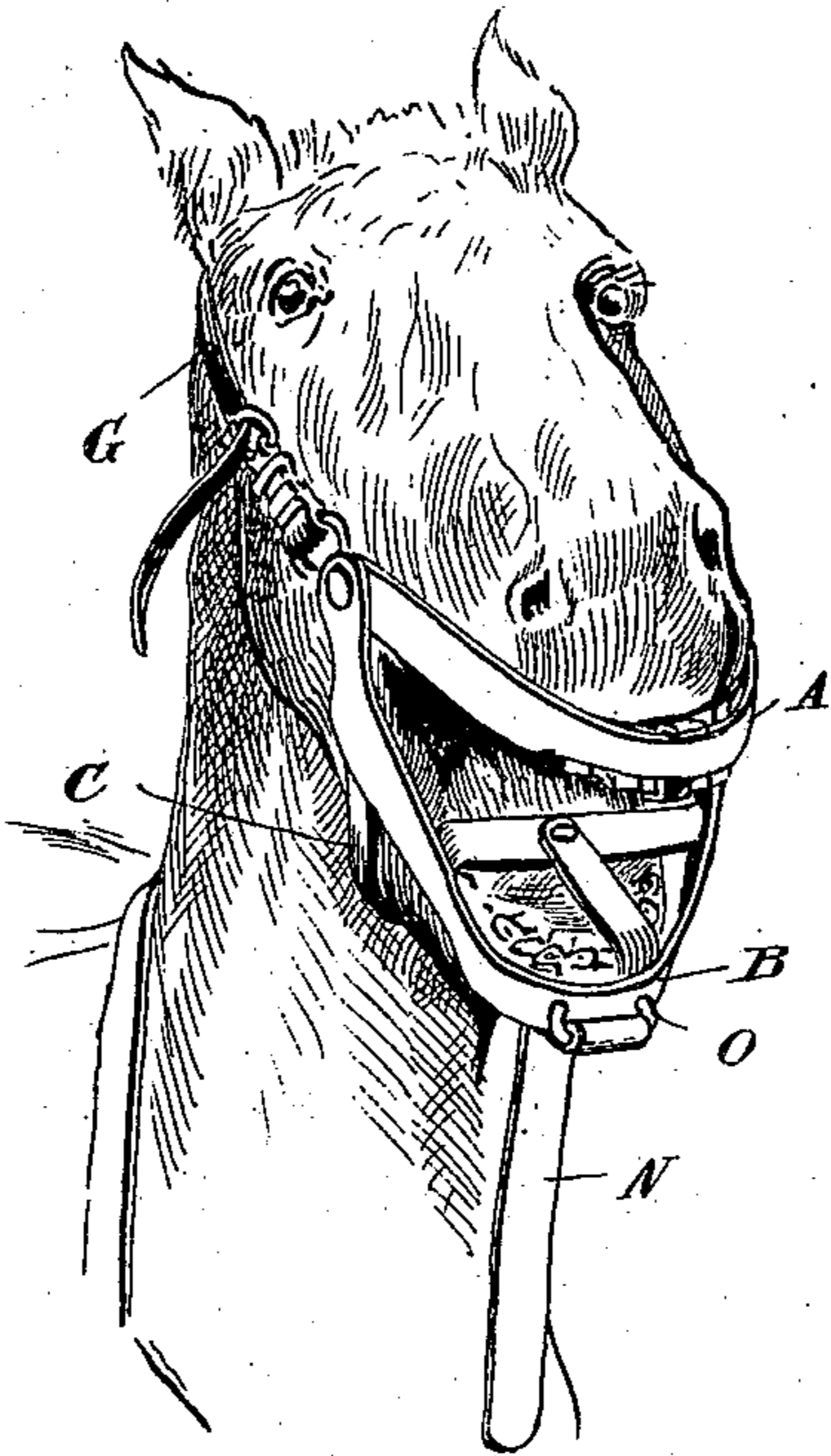


Fig. 2.

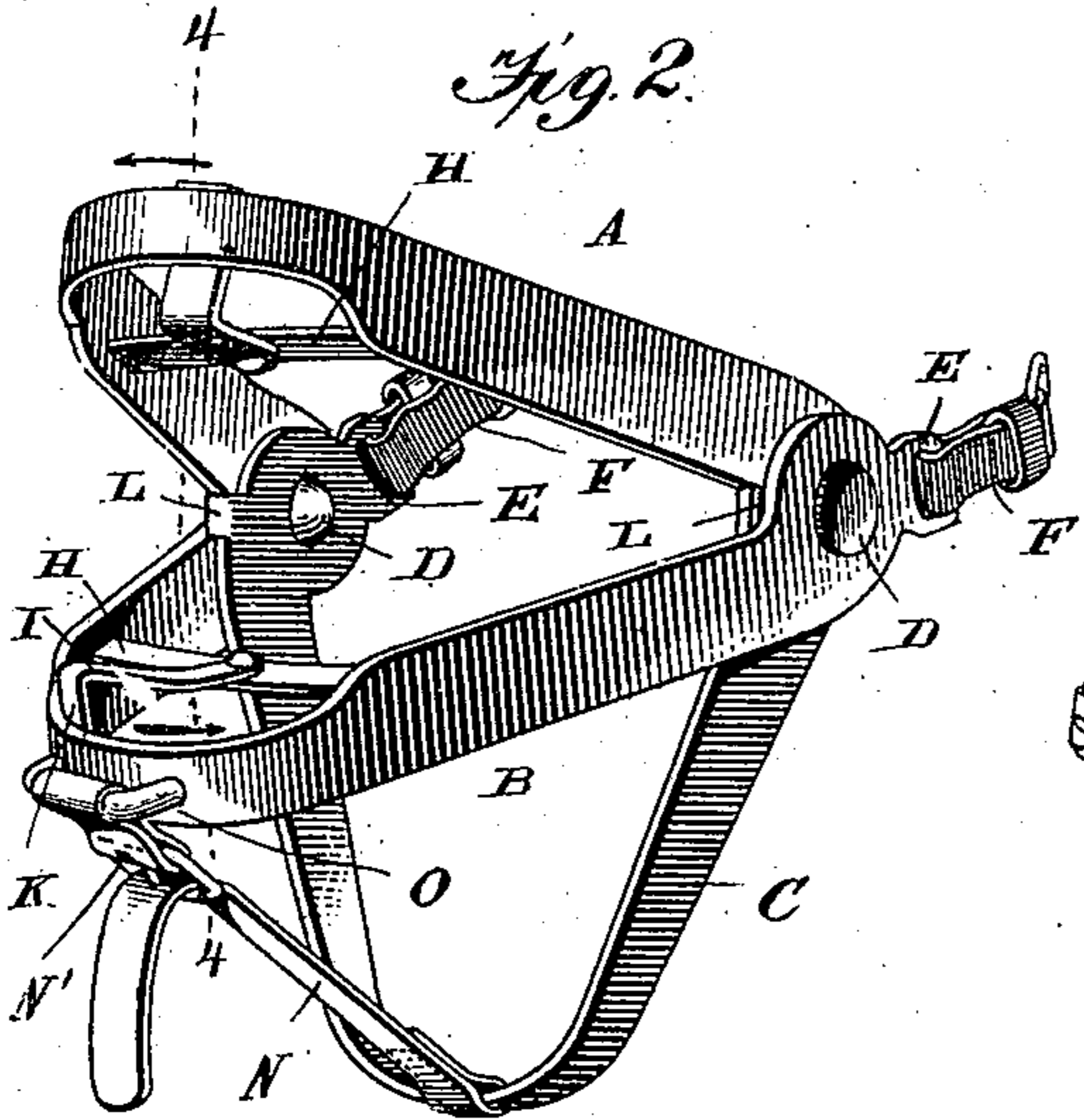


Fig. 3.

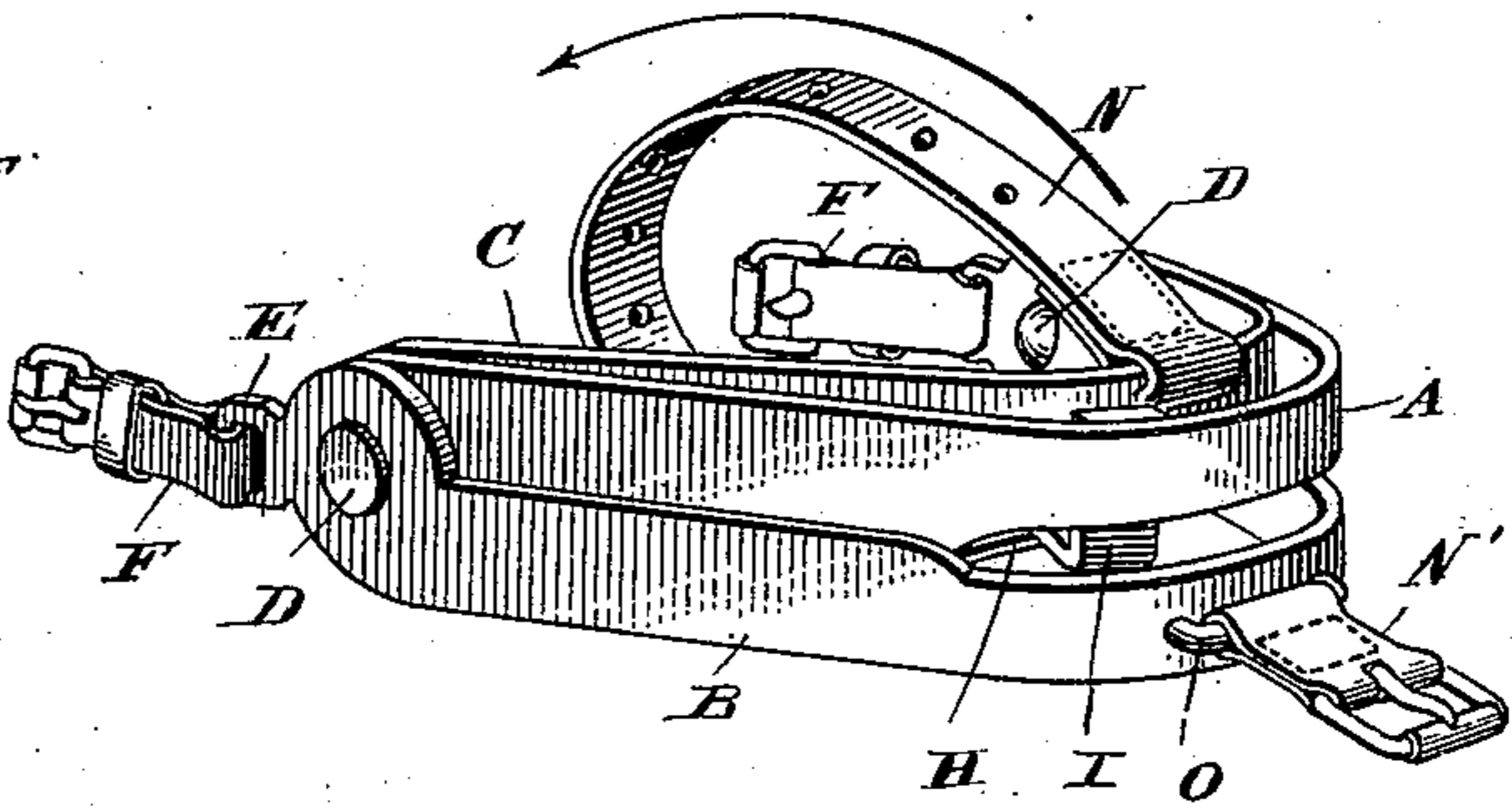
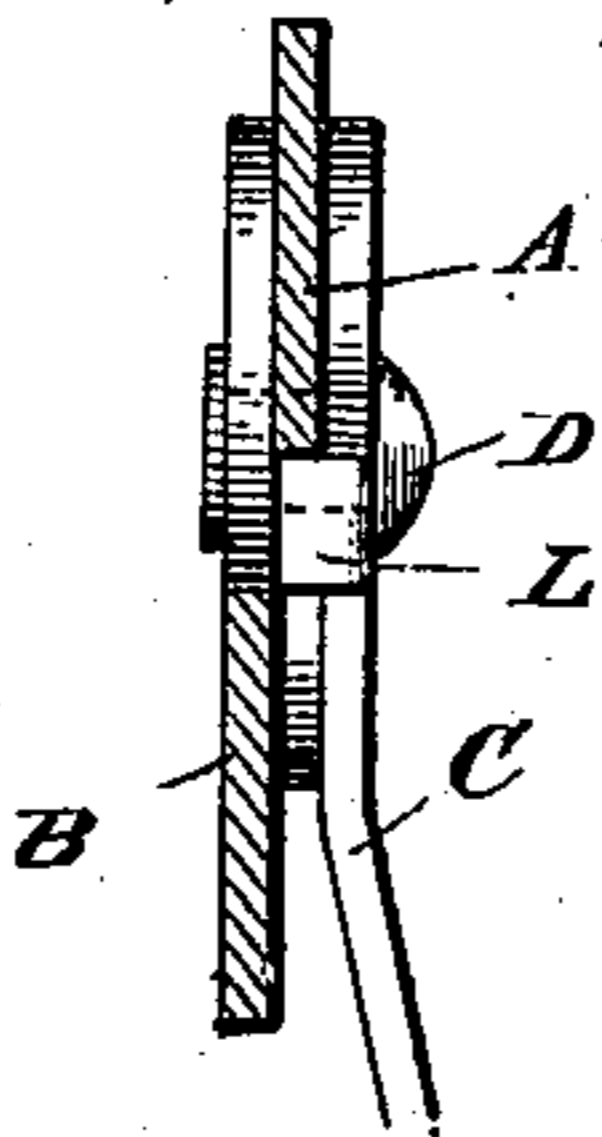


Fig. 4.



WITNESSES:

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ALEXANDER A. WALKER, OF CASSELTON, NORTH DAKOTA.

VETERINARY MOUTH-SPECULUM.

SPECIFICATION forming part of Letters Patent No. 574,591, dated January 5, 1897.

Application filed April 7, 1896. Serial No. 586,582. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER A. WALKER, residing at Casselton in the county of Cass and State of North Dakota, have invented a new and Improved Veterinary Speculum, of which the following is a specification.

This invention relates generally to veterinary surgery, and more particularly to an improved mouth-speculum for horses.

The object of the invention is to provide an instrument of this kind which shall be a decided improvement over those now in use in points of cheapness, simplicity, and efficiency.

Another object is to provide a speculum which can be quickly and easily applied to the horse's mouth without pain or harm; and another object is to provide a speculum which will hold the mouth open and still afford ample room for operating upon the teeth.

Another object is to provide a speculum which will hold down the tongue, and also hold the lips back, so that the horse cannot interfere with the operation by the movements of the tongue and lips.

A still further object is to provide a speculum in which the lever mechanism for expanding the jaws is arranged upon the exterior in contradistinction to being arranged between the jaws.

With these various objects in view my invention consists in the peculiar construction of the various parts and in their novel combination or arrangement, all of which will be fully described and then pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a view showing the invention in use. Fig. 2 is a view showing the device ready for application. Fig. 3 is a view showing the instrument folded for carrying in a satchel or valise, and Fig. 4 is a detail cross-section on the line 4 4 of Fig. 2.

In the construction of a veterinary speculum in accordance with my invention I employ the upper jaw A and lower jaw B and the lever or operating member C, all of said parts being essentially U-shaped and pivotally connected at their ends by suitable pins or rivets D, the jaw A being pivoted within the jaw B, and the lever member C is pivoted within the upper jaw A, as clearly shown in

Fig. 2. The ends of the lower jaw are also formed with suitable eyes E, to which are connected buckles F, adapted to secure a strap G, passed over the top of the horse's head back of the ears.

A cross-plate H extends across each jaw A and B, near the bow thereof, and pivotally connected to said plate are the bars I, bent at K and resting against the bow or curve of the jaw.

The lever or operating member C has shoulders or offsets L L near each end, which engage the under edges of the upper jaw in front of the pivots, and therefore as the lever or operating member is drawn forward or upward the upper jaw will be raised or opened, and in order to open the lower jaw, and at the same time provide a means for operating the lever, I connect a strap N to the lower portion of said lever member, which strap is passed through a buckle N', carried by a staple O, upon the front edge of the lower jaw B.

In Fig. 3 I have shown an instrument folded for carrying in a satchel or valise, and when it is desired to apply the speculum to the mouth of the animal the lever or operating member is swung around in the arc of a circle toward the rear, as indicated by the arrow in said figure, until the parts of the instrument assume the position shown in Fig. 2. The head-strap is then attached and the instrument is placed upon the animal, and the head-strap tightened as desired. The upper and lower jaws are then placed between the jaws of the animal, the jaws, on account of their shape, resting just outside of the teeth and pressing the lips back out of the way. The cross-plates extend entirely across the jaws of the animal, the top cross-plate resting against the roof of the mouth, while the lower cross-plate holds down the tongue of the animal. A drawing-strap is then placed through the buckle N', and the lever member drawn forward the desired extent, it being obvious that by drawing the lever member forward the upper jaw is forced upward by means of the shoulders contacting with said upper jaw, and inasmuch as the buckle through which the drawing-strap passes is connected with the lower jaw it is obvious that said lower jaw will be drawn in a direction opposite to the direc-

tion that the lever member is moved, that is, downward. By this simple operation of pulling upon the lever member the upper and lower jaws are expanded to any desired extent and can be locked in such position by simply securing the strap in the buckle.

It will be noted that the means for extending the jaws are arranged entirely upon the exterior of the mouth, so that the surgeon has perfect access to the mouth of the animal, and the cross-plate is placed at such a point that all or nearly all of the teeth are exposed, and inasmuch as the bars pivoted to said plates are movable said bars can be moved to one side to expose the teeth.

The purpose of the cross-plate and bars is to provide a base or bearing for the jaws A and B upon the jaws of the animal, inasmuch as the U-shaped jaws A and B rest upon the lips of the animal. It will thus be seen that the surgeon can easily operate upon any of the animal's teeth, and it will be noticed that the tongue and lips are held entirely out of the way, and it will also be noticed that the device is exceedingly simple in construction and operation and will not injure or pain the animal in any degree.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In a veterinary speculum the upper and lower jaws pivoted together, the cross-plates attached to the said upper and lower jaws, a lever member pivoted to the upper and lower jaws, said lever member having shoulders or offsets adapted to engage the upper jaw, the head-strap connected to the lower jaw, the drawing-strap attached to the lever member and adapted to pull upon the lower jaw, substantially as and for the purpose specified.

2. In a veterinary speculum, the upper and lower jaws pivoted together, the lever member pivotally attached to said upper and lower jaws, said lever member having shoulders or offsets to engage the upper jaw, the head-strap connected with the lower jaw, the cross-plates and pivoted bars, the drawing-strap attached to the lever, the staple and buckle attached to the lower jaw, and through which the drawing-strap passes, substantially as shown and described.

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Witnesses:

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