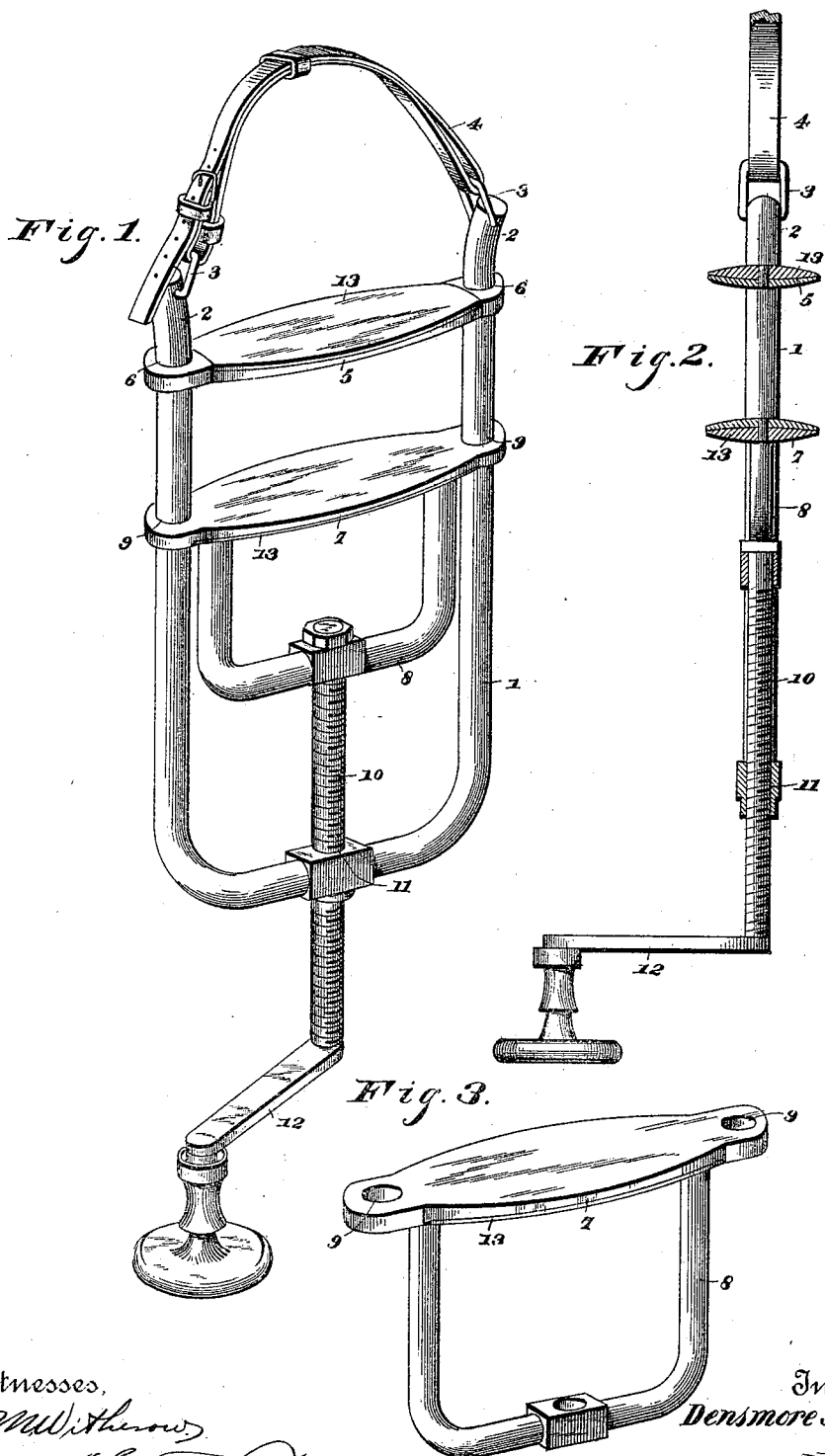


(No Model.)

D. J. BUNCE.  
VETERINARY SURGICAL INSTRUMENT.

No. 421,814.

Patented Feb. 18, 1890.



Witnesses,

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# UNITED STATES PATENT OFFICE

DENSMORE J. BUNCE, OF NEVADA, IOWA.

## VETERINARY SURGICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 421,814, dated February 18, 1890.

Application filed December 16, 1889. Serial No. 333,951. (No model.)

*To all whom it may concern:*

Be it known that I, DENSMORE J. BUNCE, a citizen of the United States, residing at Nevada, in the county of Story and State of Iowa, have invented a new and useful Veterinary Surgical Instrument, of which the following is a specification.

The invention relates to veterinary surgical instruments.

The object of the present invention is to provide a veterinary surgical instrument of simple and inexpensive construction, possessing great strength and durability and adapted to be readily applied to the mouth of a horse, and capable of gradually opening the same without fear of exciting or annoying the animal.

The invention consists in the construction and novel combination and arrangement of parts hereinafter described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of an instrument constructed in accordance with my invention. Fig. 2 is a central transverse sectional view. Fig. 3 is a detail view of one of the cross-bars.

Referring to the accompanying drawings, 1 designates a stationary frame which is approximately U-shaped and has its upper end 2 perforated and provided with loops 3, to which is secured a strap 4, which passes over the nose of the horse and secures the device to the head of the animal. The stationary frame 1 is constructed of bar-iron and is circular in cross-section, and is provided near its upper end with a stationary cross-bar 5, that has openings 6 in its ends, through which project the sides of the frame 1. The cross-bar 5, which is stationary and rigidly attached to the frame 1, engages the upper jaw of the animal, and a sliding cross-bar 7, similar in construction to the cross-bar 5, is rigidly attached to a movable frame 8, that is U-shaped and has its sides arranged adjacent to the sides of the stationary frame 1, and is constructed of similar metal and is provided at its ends with openings 9, which receive the sides of the stationary frame 1 and enable the bar to move upon the latter. The sliding frame is actuated by an adjusting-screw 10, that is swiveled centrally to the movable frame 8 and engages a threaded opening 11 in the bottom of the stationary frame. The adjusting-screw 10 is operated

by a crank 12, that is preferably formed integral with the screw.

In order to prevent injury to the mouth of the animal, the cross-bars are provided, respectively, on their upper and lower faces, which engage the jaws of the animal, with plates 13, of rubber, lead, or some soft substance which will not injure the teeth or hurt the mouth. The plates are riveted or similarly secured to the cross-bars, and are slightly convex, and the said plates are adapted to fit closely together, in order that they may be readily inserted in the mouth of a horse as easily as an ordinary bit.

From the foregoing description and the accompanying drawings it will be readily seen that the device is simple and inexpensive in construction, that it possesses great strength and durability and is not liable to get out of order and become inoperative, and that it may readily be inserted in the mouth of an animal and open his mouth without exciting him or causing annoyance, and that the mouth can be opened as wide as desired to expose the same and the throat, and to enable access thereto to be readily had.

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

A veterinary instrument comprising the stationary U-shaped frame having its ends perforated and provided with loops, the strap secured to the loop and adapted to attach the device to the head of an animal, the stationary cross-bar provided with openings in its ends to receive the sides of the stationary frame, the movable cross-bar provided with similar openings to receive the said frame and sliding thereon, the movable frame arranged within the stationary frame and rigidly secured to the movable cross-bar, the adjusting-screw swiveled to the movable frame and engaging a threaded opening in the stationary frame and provided at its lower end with a crank, and the protecting-plates 13, secured to the faces of the cross-bars, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DENSMORE J. BUNCE.

Witnesses:

CHAS. E. ARMSTRONG,  
CHARLEY M. DAY.