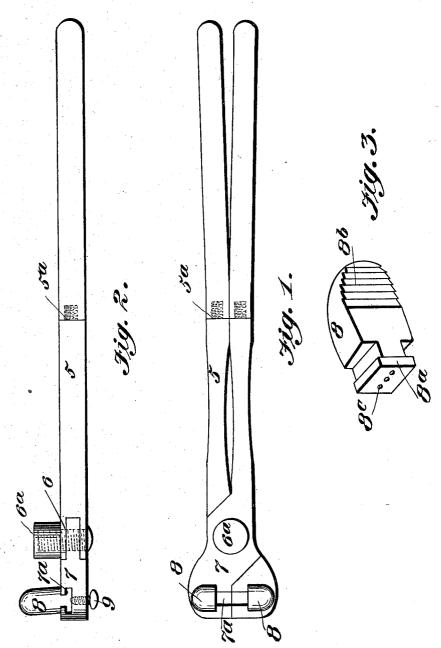
G. ANDERSON. VETERINARY FORCEPS. APPLICATION FILED FEB. 16, 1903.

NO MODEL.



WITNESSES:

O. E. Murray.

Motmar anderson.

Milo B. Stevene & C.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GOTMAR ANDERSON, OF HORACE, NORTH DAKOTA.

VETERINARY FORCEPS.

SPECIFICATION forming part of Letters Patent No. 733,114, dated July 7, 1908.

Application filed February 16, 1903. Serial No. 143,507. (No model.)

To all whom it may concern:

Be it known that I, GOTMAR ANDERSON, a citizen of the United States, residing at Horace, in the county of Cass and State of North Dakota, have invented certain new and useful Improvements in Veterinary Forceps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in

to the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to veterinary forceps, and has for its object to provide a strong and efficient instrument of this kind having adjustable jaws to adapt it to the varying con-

ditions under which it is used.

A further object is to provide a fulcrum for the handles by means of which the operation

of the instrument is made more effective.

Improved details in the construction and arrangement of the various parts of my invention will be apparent from the detailed description hereinafter and the appended claims when read in connection with the accompanying drawings, forming a part thereof, in which—

Figure 1 is a side view of my invention. Fig. 2 is an edge view thereof. Fig. 3 is a perspective view of one of the adjustable jaws.

Referring specifically to the drawings, 5 indicates the handles of the forceps jointed at 5" by a screw and socket, so that they may be unjointed for convenient carriage. The handles are crossed and pivoted together, as at 6. The head-pieces or operating ends 7 have an underent groove 73 artered.

40 have an undercut groove 7° extending transversely across the same to receive the jaws 8. These jaws project angularly from the handles to permit a back tooth to be readily grasped and to give a straight pull when the

45 handles are turned as a lever upon a fulcrum afforded by a cap-nut 6° on the pivotscrew of the handles. The jaws have a Tshaped shank 8°, fitting in the groove 7°, and the face of each jaw is roughened or serrated, as at 8^b, for an obvious purpose. A set-screw 50 9, passing through the head-pieces 7 and into one of a number of holes 8° in the bottom of the jaws 8, securely locks the same to the heads. This construction permits the jaws to be set closely together or farther apart, as 55 desired. The cap-nut 6^a can be raised or lowered to suit the occasion, by which the fulcrum is raised or lowered.

Having thus described my invention, what is claimed as new, and desired to be secured 60 by Letters Patent, is—

1. The combination in a pair of forceps, of crossed handles, and jaws secured thereto having lateral adjustment thereon, whereby the distance between the jaws may be varied, 65 substantially as described.

2. A pair of forceps comprising crossed handles, heads thereon having transverse grooves, and jaws adjustably secured in the grooves, substantially as described.

3. The combination in a pair of forceps, of crossed handles, heads thereon having transverse undercut grooves, jaws having an undercut shank fitting said grooves and adjustable therein, and set-screws engaging the 75 heads and shanks, substantially as described.

4. The combination in a pair of forceps, of pivoted handles, laterally-adjustable jaws extending sidewise therefrom, and a cap-nut on the pivot projecting on the same side as 80 the jaws and adapted to form a fulcrum for the handles, substantially as described.

5. The combination in a pair of forceps, of pivoted handles, laterally-adjustable jaws extending sidewise therefrom, and an adjustable cap-nut on the pivot projecting on the same side as the jaws and adapted to form a fulcrum for the handles, substantially as described.

In testimony whereof I affix my signature 90 in presence of two witnesses.

GOTMAR ANDERSON.

Witnesses:

ENA G. KIRKLAND, ALBERT NELSON.