

(No Model.)

2 Sheets—Sheet 1.

W. STEMEN.
ANIMAL STOCK.

No. 454,501.

Patented June 23, 1891.

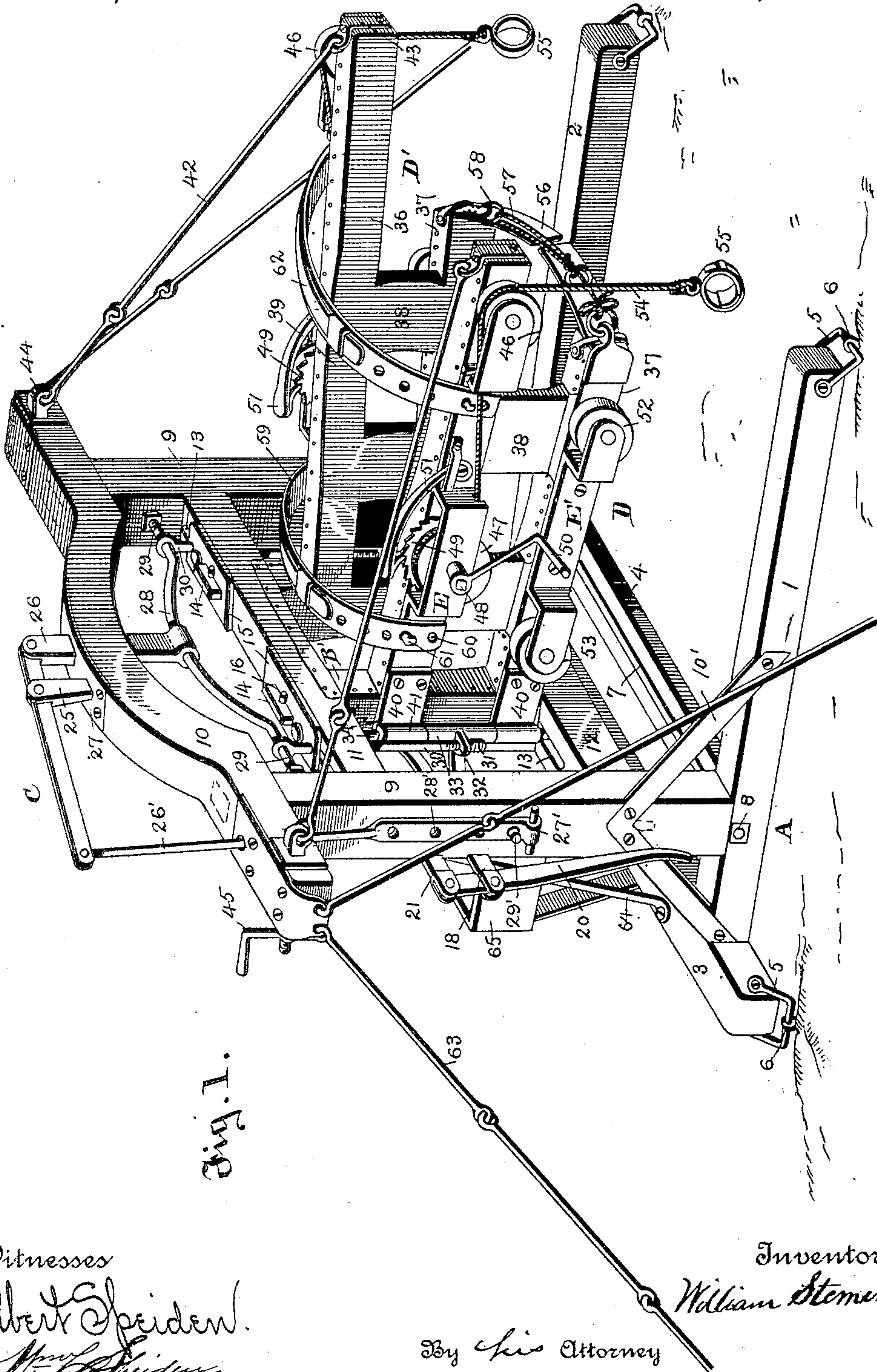


Fig. 1.

Witnesses
Albert Spiden.
" " " " " "

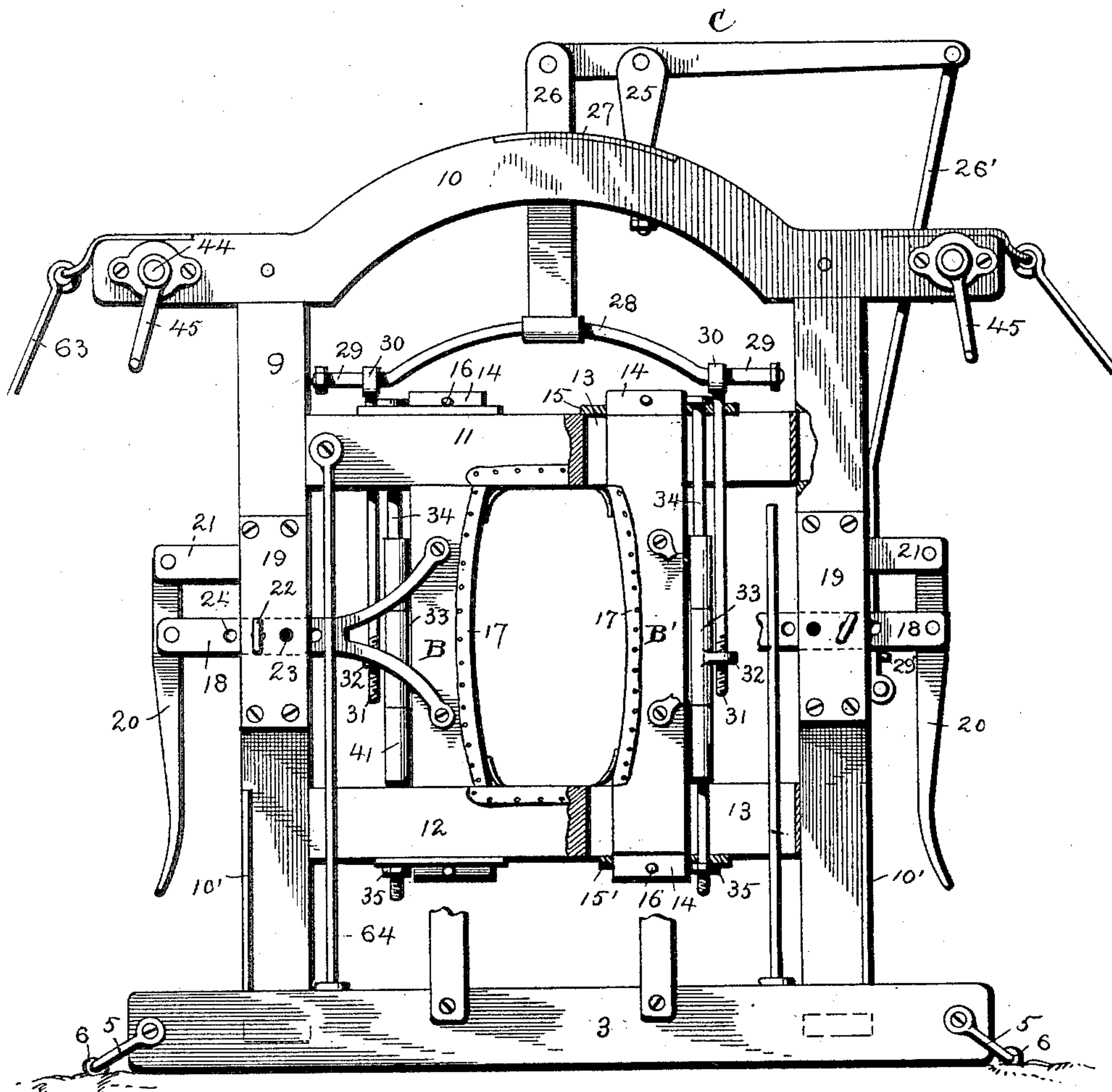
Inventor
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2 Sheets—Sheet 2.

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Fig. 2.



Witnesses

Albert Speiden.
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UNITED STATES PATENT OFFICE.

WILLIAM STEMEN, OF BREMEN, OHIO.

ANIMAL-STOCK.

SPECIFICATION forming part of Letters Patent No. 454,501, dated June 23, 1891.

Application filed February 9, 1891. Serial No. 380,799. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM STEMEN, a citizen of the United States of America, residing at Bremen, in the county of Fairfield and State of Ohio, have invented certain new and useful Improvements in Animal-Stocks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to an improvement in animal-stocks, and has for its object to provide an apparatus adapted more particularly to be used for the purpose of securely holding a horse while being shod, the construction of the stock being such that while the animal will be firmly held against lateral or endwise movement it will at the same time be prevented from kicking, biting, or otherwise injuring or annoying the attending mechanic.

A further object is to provide means for elevating and holding either one of the animal's feet, so as to facilitate the fitting of a shoe and the clinching and final finishing of the nails.

A further object is to provide means for adjusting the stock to horses of different sizes.

The invention will first be described in connection with the accompanying drawings, and then pointed out in the claims.

Figure 1 is a perspective view of the device as it appears when in use. Fig. 2 is a front elevation, showing more particularly that portion of the device designed to engage the horse's neck.

Referring to the drawings, A designates the base of the stock, consisting of two parallel side beams 1 and 2 and end beam 3 and a transverse beam 4. The end beam extends some distance beyond the side beams, and the three beams are each provided with a link 5, carrying an eyebolt 6, by means of which the stock is firmly secured in position at any desired point. The base is further braced and held against spreading by means of a headed rod 7, carrying at one end a nut 8, which bears against the beam 1. Upon the side beams are mounted two uprights 9, the upper ends of which are connected and braced by means of a cross-piece 10, which in this instance is shown yoke-shaped, and the bottoms of the uprights are braced by means of

inverted-V-shaped braces 10'. To the uprights 9, at points between the base and the cross-piece 10, are rigidly secured two cross-pieces 11 and 12, which are vertically slotted at each end longitudinally of their length, as at 13, for a purpose that will presently appear.

B B' designate two sliding jaws, the upper and the lower ends of each of which are provided with tenons 14, which fit loosely in the slots 13, the said tenons being passed through plates 15 and 15', located, respectively, upon the top side of the upper cross-piece 11 and the under side of the lower cross-piece 12, which plates are held in place by pins 16, which pass through the tenons and bear upon the respective plates. The jaws are curved on their inner faces and are padded, as shown at 17, so as to present a soft and yielding surface to the neck of the horse, which is designed to be engaged by the jaws when the stock is in use. To each of the jaws is secured the inner bifurcated end of a slide-rod 18, the outer portion of each of which works between plates 19 and the outer surface of the uprights. The outer end of each of the slide-rods connects with a lever 20, fulcrumed to projections 21 on the uprights, which levers serve to open or to close the jaws as the former are correspondingly moved, pins 22, passing through openings 23 in the plates 19 and openings 24 in the slide-rods, serving to hold the jaws in any desired adjustment.

C designates a lever fulcrumed at 25 upon the cross-piece 10 and connecting at its inner end with the upper end of a vertical slide-rod 26, which works in slots formed, respectively, in the said cross-piece and in a plate 27, secured thereto, and the outer end of the lever carries a rod 26', which extends down a sufficient distance to be within easy reach of a person standing on the ground, and is provided with a hand-piece 27' and with a series of perforations 28', designed to engage a projection 29', secured to one of the uprights. The lower end of the slide-rod 26 connects with a curved rod 28, the straight end portions 29 of which serve as bearings for the upper ends of two vertical rods 30, which pass through plates 15 and engage at their lower threaded ends 31 with threaded lugs 32, carried by collars 33, movably mounted upon vertical headed rods 34, which latter extend

through the plates 15 15' and are held in position by means of nuts 35 engaging their lower threaded ends.

D D' designate two side wings, each consisting of two parallel bars 36 37, of which the upper one 36 is the longer, and two spacing-blocks 38, to which the parallel bars are secured. The inner surfaces of the bars and of the blocks are padded for the same reason as are the jaws and are also slightly concaved, as shown at 39, so as to conform somewhat to the contour of the horse.

Upon the front ends of the bars 36 37 of both wings are secured plates 40, the projecting ends of which are formed into collars 41, loosely fitting on the vertical rods 34, one above and the other below the collars 33. The collars 41 form supports for the front ends of the wings, and also admit of their being swung out to a position approximately at right angles to that which they occupy when the stock is in use, which latter position is shown in Fig. 1. The rear ends of the wings are supported by jointed stay-rods 42, which connect, respectively, with plates 43 on said wings and with the inner ends of rods 44, loosely mounted in the cross-piece 10 and carrying on their outer threaded ends correspondingly-threaded cranks 45, by means of which the said stay-rods may be lengthened or shortened at will, so as to admit of the wings being raised or lowered, as the difference in the sizes of the horses to be shod may require.

E E' designate two metallic plates secured, respectively, to the upper and to the lower bars 36 37 of each of the wings. The upper plate E is formed with two keepers, in which are journaled, respectively, a pulley 46 and a drum 47, upon the inner end of the shaft 48 of which latter is mounted a ratchet-wheel 49, and on the outer end is mounted a crank 50 for turning the shaft and ratchet-wheel, a pawl 51, pivoted to the plate, serving to hold the said wheel at any desired point. The lower plate E' is provided with a like number of keepers, in which are journaled pulleys 52 53, which pulleys, together with pulley 46, are engaged at different times during the operation of shoeing a horse by a rope or chain 54, one end of which is secured to the drum 47, and its other end carries a clasp 55, designed to be secured to the horse's ankle. The wings are also furnished with a breeching-strap 56, which is held taut by means of a cord or rope 57, which engages with rings 58, carried by the strap. The wings are further provided with back-straps 59, one end of each of which is firmly secured to one of the wings, and the free ends are provided with openings 60, designed to engage with pins 61, carried by the wings. The straps carry springs 62, designed to exert an upward pressure, so that when the straps are released from engagement with the pins 61 they will be automatically moved out of contact with the horse.

In addition to the links 5 and eyebolts 6

for bracing the stock, guy-rods 63 are employed, which are secured at their upper ends to the cross-piece 10 and at their lower ends to the ground. The uprights are also braced against any tendency to leaning backward (as from the weight of the wings and their attached mechanism) by means of brace-rods 64, secured respectively to the end beam 3 and the cross-piece 11.

Having thus fully described my invention, I will explain the manner of its operation when in use: The wings are first opened out to their full extent and the horse is led between the same, when, by feed in a trough 65, he is induced to thrust his head between the jaws B B'. The wings are then closed and are secured together by means of the breeching-strap, and if it is found that the wings are too high or too low to bring the curved portions 39 into contact with the horse's sides this trouble can easily be remedied by raising or by lowering the lever C, which will move the wings to the desired position, after which the jaws are moved into contact with the horse's neck by means of levers 20 and the back straps are secured in place. One of the clasps 55 is then secured in place upon one of the hind feet between the ankle-joint and the hoof, and the crank 50 is turned, thus elevating the foot to the desired height for securing a shoe in place, the rope in this instance being placed over the pulley 46. After the shoe is secured in place the rope is removed from the pulley 46 and is placed upon the pulley 52, and, as the latter is located nearer the horse's head than the first-named pulley, it follows that when the crank is turned the foot will be drawn to a position most convenient for clinching and finishing the nails. The operation just described is repeated in securing the other hind shoe in place. When the front feet are to be shod, the rope is removed from the pulley 52 and the clamp secured in place, and by turning the crank the foot is lifted to the position most convenient to admit of the shoe being secured in place. The rope is then placed over the pulley 53 and the crank is again operated to bring the foot into proper position for clinching and finishing the nails.

In order to quiet a fractious horse or to persuade a timid one to thrust his head between the jaws, the feeding-trough 65 is provided, which, when filled with suitable feed, will tend to distract the horse's attention and prevent its becoming restless while being shod.

From the foregoing description it will be seen that I provide mechanism for adjusting both the side wings and the jaws, the former both vertically by means of the lever C and laterally by means of the levers 20, for in moving the jaws the forward ends of the wings are also moved, whereby any size of horse may be secured in the stock.

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

1. In an animal-stock, a base, uprights carried thereby, and cross-pieces secured to the uprights, in combination with sliding jaws mounted between the cross-pieces, and levers 5 carried by the uprights and connecting with the jaws for opening and closing the same.

2. In an animal-stock, a base, uprights carried thereby, and cross-pieces secured to the uprights, in combination with sliding jaws 10 mounted between the cross-pieces, mechanism for opening and closing the jaws, and adjustable side wings hinged adjacent to and adapted to move laterally in unison with the said jaws.

3. In an animal-stock, a base, uprights carried thereby, and cross-pieces secured to the uprights, in combination with rods carried by the cross-pieces, side wings having a sliding connection with the rods, and mechanism for 20 raising or lowering the said wings.

4. In an animal-stock, a base, uprights carried thereby, a cross-piece secured to the upper ends of the uprights, and slotted cross-pieces secured to the uprights between the 25 base and the top cross-piece, in combination with rods carried by the slotted cross-pieces, side wings having collars loosely engaging the rods, collars located between the collars of said wings and having lugs thereon, a lever

carried by the top cross-piece, and mechanism 30 connecting the lever and the lugs, whereby when the lever is actuated the side wings will be correspondingly raised or lowered.

5. In an animal-stock, the combination, with movable side wings, of a breeching-strap 35 for securing the wings together and spring-actuated back-straps carried by one of the wings and having perforations designed to engage projections on the other wing.

6. In an animal-stock, the combination, with 40 movable side wings, of spring-actuated back-straps carried by one of the wings and having perforations designed to engage projections on the other wing.

7. An animal-stock having vertically and 45 laterally adjustable side wings, in combination with a ratchet-and-pawl mechanism and a series of pulleys carried by each wing and a rope designed to engage each series of pulleys, one end of each of the ropes being se- 50 cured to the ratchet mechanism and the other end being provided with a clasp.

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

WILLIAM STEMEN.

Witnesses:

J. J. GROFF,

L. O. BINCKLEY.