No. 819,429. PATENTED MAY 1, 1906.

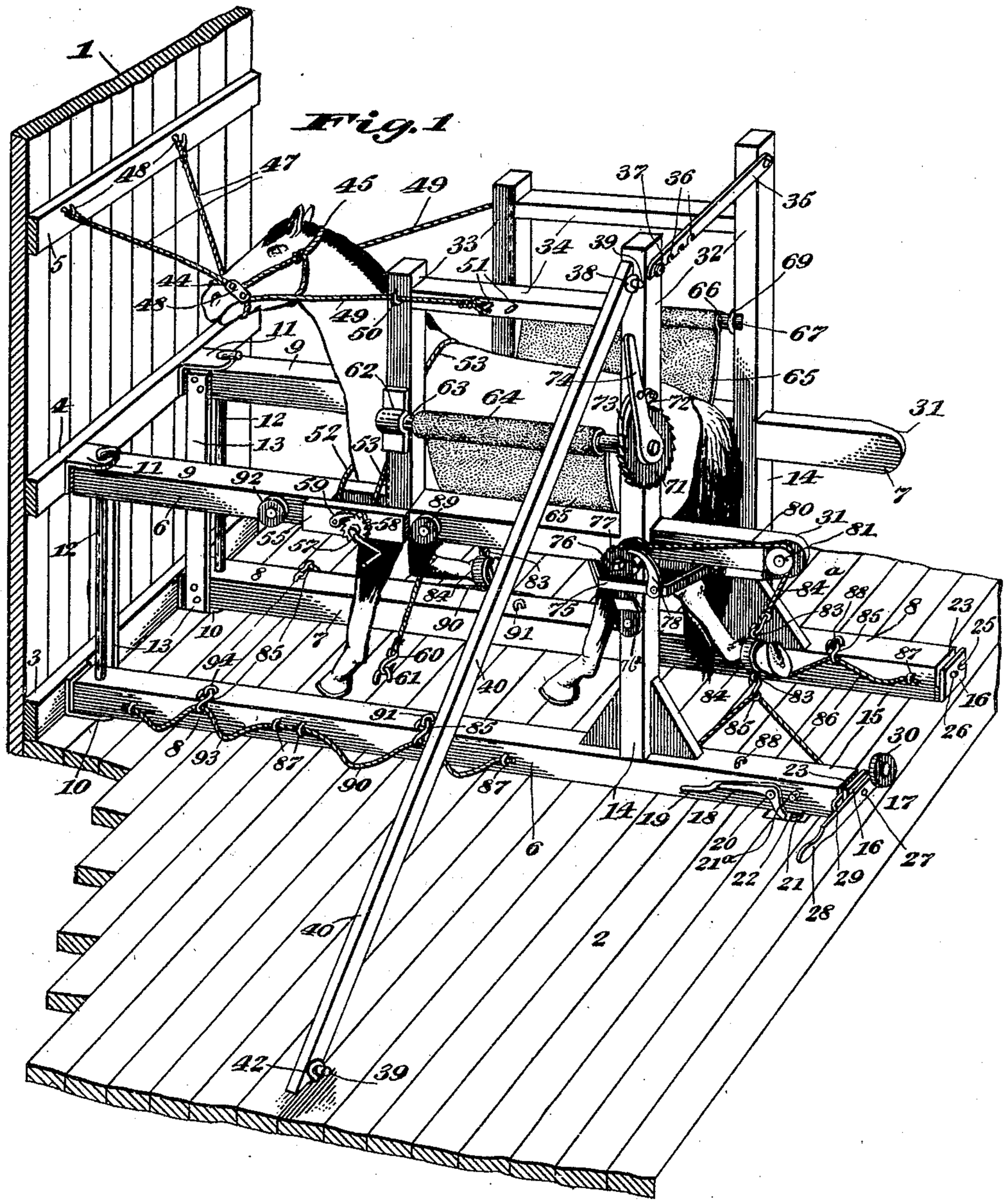
M. L. HEMPHILL.

HORSESHOEING STOCKS.

APPLICATION FILED APR. 10, 1905.

3 SHEETS—SHEET 1

Fig. 1



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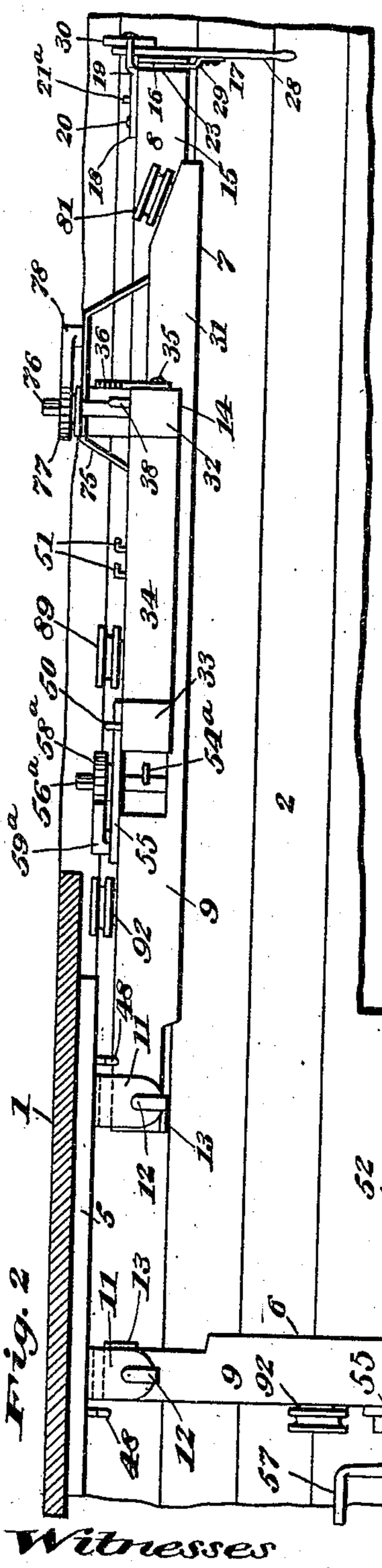

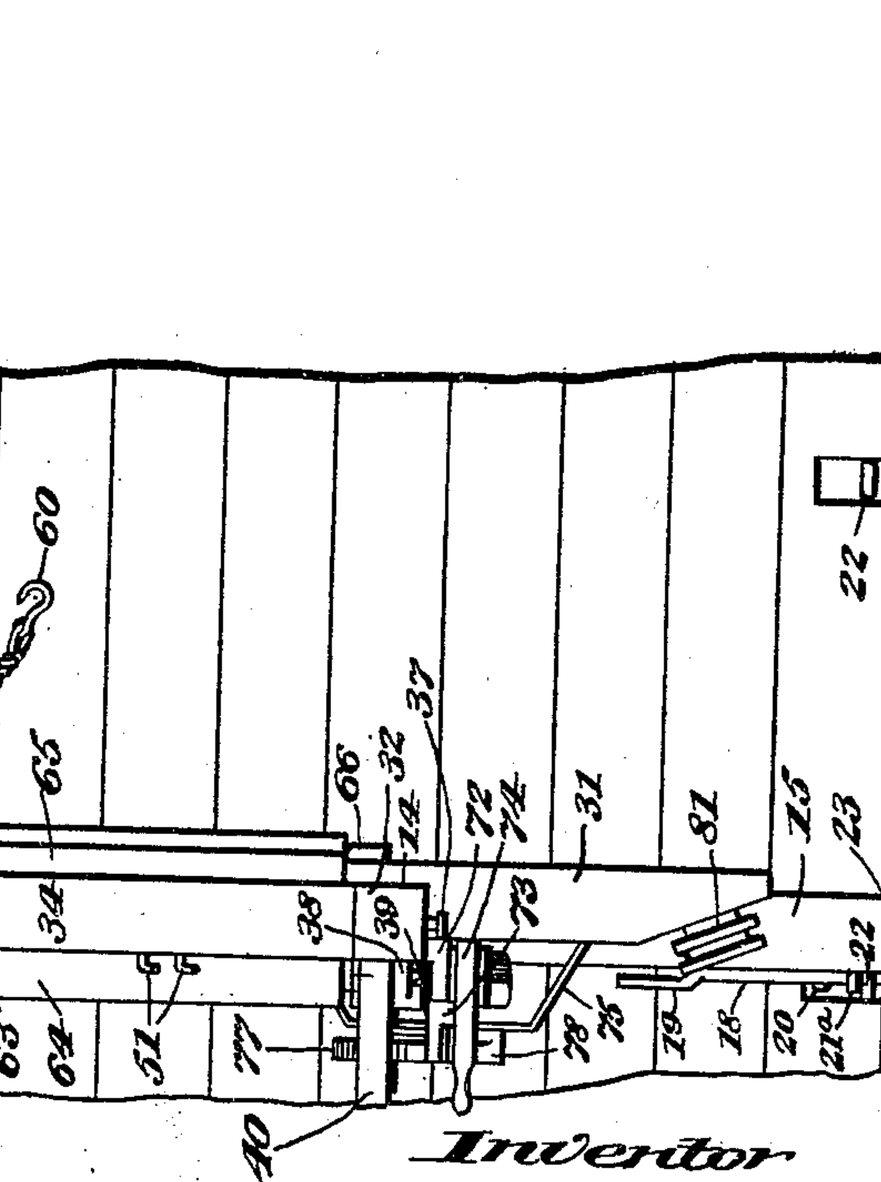

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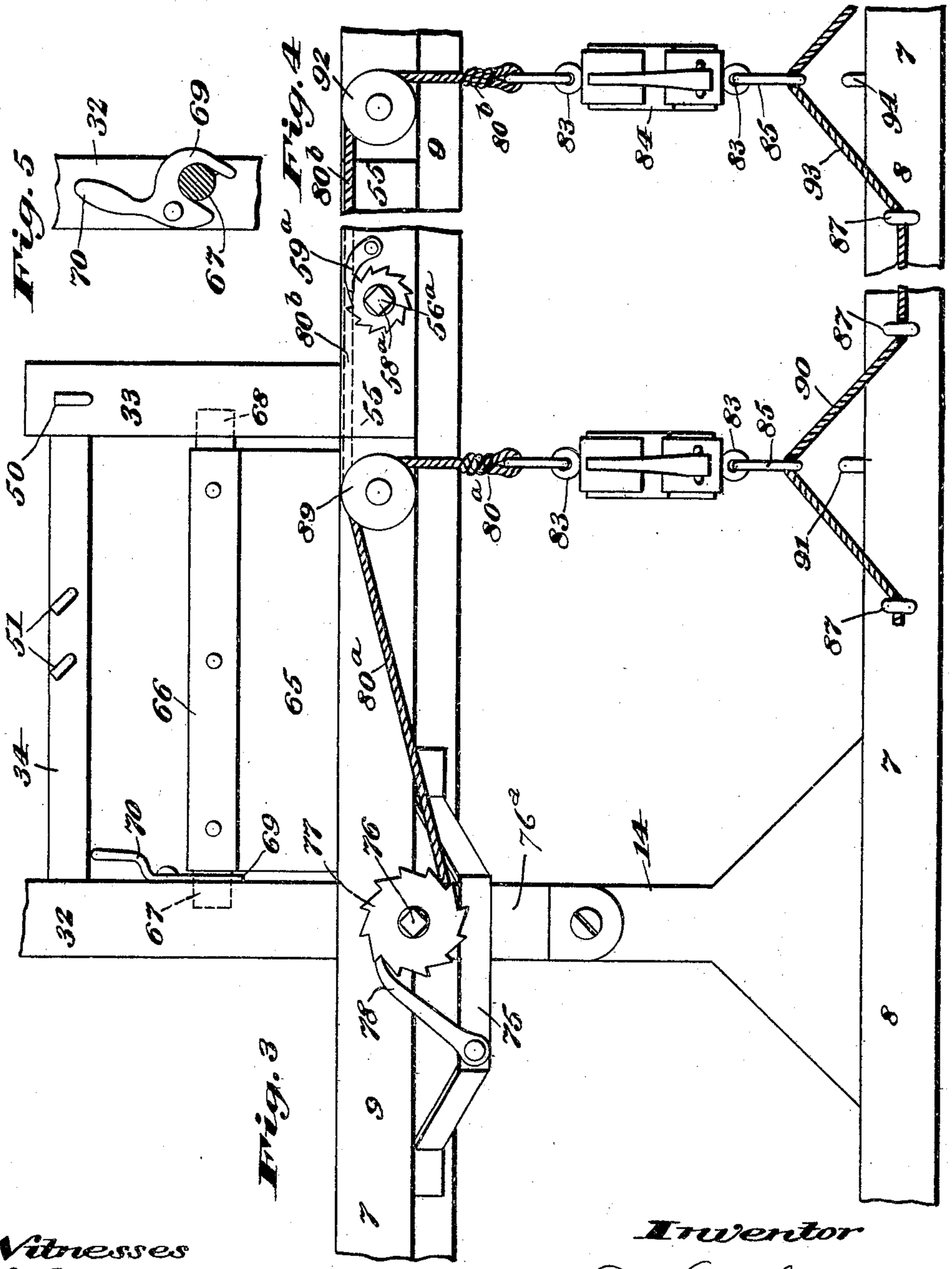
3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

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HORSESHOEING-STOCKS.

No. 819,429. Specification of Letters Patent. Patented May 1, 1906.

Application filed April 10, 1905. Serial No. 254,718.

To all whom it may concern:

Be it known that I, MARTIN L. HEMPHILL, a citizen of the United States, residing at Rensselaer, in the county of Jasper and State of Indiana, have invented certain Improvements in Horseshoeing-Stocks, of which the following is a specification.

This invention relates to certain improvements in that class of devices commonly known as "stocks," which are designed for employment by horseshoers, smiths, and others for holding horses in position while being shod; and the object of the invention is to provide a device of this general character of a simple and inexpensive nature and of a sufficiently strong construction to adapt it for practical use without imposing additional strains upon the walls or framing of the shop or building wherein the device is set up for use and by means of which horses may be conveniently and securely held while being shod, so that a material saving in time is effected in the shoeing operation and the danger of kicking by vicious animals is altogether avoided.

The invention consists in certain novel features of the construction, combination, and arrangement of the several parts of the improved horseshoeing-stocks, whereby certain important advantages are attained and the device is rendered simpler, cheaper, and otherwise better adapted and more convenient and desirable for use, all as will be hereinafter fully set forth.

The novel features of the invention will be carefully defined in the claims.

In the accompanying drawings, which serve to illustrate my invention, Figure 1 is a perspective view showing a horseshoeing-stocks embodying my improvements and set up in position for use in horseshoeing. Fig. 2 is a plan view of the improved stocks, showing the movable frame or member thereof adjusted into opened position ready to receive a horse to be shod or so as to occupy less space within the shop or building when not required for use. Fig. 3 is a partial side view of the stocks, illustrating certain features of construction and arrangement to be hereinafter referred to; and Fig. 4 is a view similar to Fig. 3, but taken at a point nearer the hinged end of the stocks for illustrating certain auxiliary holding means to be hereinafter referred to. Fig. 5 is a fragmentary detail view showing the detent for holding in position the detachable end of the lifting-apron at the adjustable frame or member while the stocks are in use. Fig. 6 is an enlarged detail view showing the adjustable traveler for supporting the movable or swinging frame or member above the floor during movement thereof.

In the views, 1 indicates one of the walls of the shop or building wherein the improved horseshoeing-stocks are erected for use, and 2 represents the floor of said shop or building, while 3, 4, and 5 represent, respectively, transverse strips or plates of wood or the like which are attached one above the other in horizontal arrangement to the wall 1, as clearly shown in Fig. 1 of the drawings.

As herein shown, the improved horseshoeing-stocks comprise two similar frames or side portions which may conveniently be formed from wooden beams and sills suitably joined and connected together, and on said frames or side portions, which are herein indicated at 6 and 7, respectively, are carried the requisite means for holding the horse in posision during the shoeing operation according to my invention. According to my invention, said frames or side portions 6 and 7 are spaced away from each other so that the horse may be led between them in order that the several securing means may be operated to hold him against kicking or struggling, and one or both of said frames or side portions may be pivotally movable or adjustable in order that the frames may be widely separated from each other for conveniently leading the horse between them and may also be swung back out of the way—as, for example, against one or both walls of the shop or building—when the stocks are not in use. In the accompanying drawings, and notably in Fig. 1, I have illustrated both said frames or side portions 6 and 7 as adapted for such pivotal adjustment in and out of position for use; but it will be obvious that without material departure from the principles and spirit of the invention one of said frames or side portions—as, for example, the frame 6—may be made stationary and incapable of such adjustment, for which purpose it may be braced or connected in any desired way with one of the building or shop walls.

As herein shown, the frames or side portions 6 and 7 of the improved stocks are of very similar construction, each such frame or side portion comprising a lower sill 8, adapted to be rested upon and preferably secured to the shop-floor 2 by means to be hereinafter explained while the stocks are in use,

but capable of being slightly elevated also by means to be hereinafter explained, so that when desired, the frames or side portions may be pivotally swung apart from each other to permit the animal to be led in or from between the frames. Each frame or side portion 6 and 7 is also formed with a rail 9, parallel to and arranged at a convenient height above the corresponding sill 8 for the support and attachment of certain operative parts and securing means, as will be presently explained.

The upper and lower rails and sills 9 and 8 of the respective frames or side portions 6 and 7 are held in hinged relation upon one of the building-walls—as the wall 1, for example—by means of the respective upper and lower strips or wooden plates 4 and 3, as herein shown; but it will be obvious from an understanding of the invention that instead of securing said strips upon said wall 1 they may, if desired, be secured upon posts or uprights specially set for the purpose within the shop or building. The lower strip or plate 3 has at suitable points angular brackets 10 10 secured upon it, and the projecting portions of said brackets 10 are designed for engagement beneath the ends of the respective sills 8 8, while upon the upper strip or plate 4 there are secured at suitable points other similar angular brackets 11 11, with projecting portions adapted to engage upon the upper faces of the respective rails 9 9 at the hinged ends thereof.

12 12 indicate hinge-pins, which are passed vertically through the alined hinge ends of the rails and sills 9 and 8 of the respective frames or side portions 6 and 7, said pins 12 being also engaged with the projections of the brackets 10 and 11 below and above the sills and rails in such a way as to hold the respective frames 6 and 7 in hinged relation to the strips or plates 3 and 4 and also to the wall or other supporting means on which said strips or plates are held, and adjacent to said hinge-pins 12 the respective upper and lower rails and sills of the frames 6 and 7 are tied together and braced by vertically-extended brace rods or strips 13 13, which may be formed from metal or wood, as desired. This structure affords convenient hinges, on which the frames or side portions of the stocks may be pivotally swung toward or from each other and is of such a nature as to permit of readily and quickly removing one or both frames from the wall whenever desired for repair or other purpose. It will of course be apparent that if the frame 6, which I have herein styled a "stationary" frame, is never intended to be moved the hinge connection therefor may be dispensed with.

Adjacent to the opposite or free ends of the rails and sills of the respective frames 6 and 7 are arranged uprights 14 14, which are mortised into the respective rails and sills or are otherwise secured thereto, so as to form a secure attachment and brace between the said free ends of the rails and sills, and the extremities 15 of the sills 8 8 of the respective frames or side portions are extended beyond said uprights 14 and carry end plates 16, which serve for the removable attachment of rollers or travelers 17 of special construction, to be hereinafter explained, and by means of which, as above stated, the free ends of the frames or side portions can be slightly elevated to clear them from the shop-floor 2, so that the frames or one of them may be supported upon such rollers or travelers while being pivotally swung in or out of position for use. The said extremities 15 of the respective frames or side portions are also provided with locking devices, as indicated at 18 on Fig. 1, and by means of which said frames, or one of them in case the other frame be absolutely stationary, may be securely locked to the shop-floor 2, and so held against pivotal or swinging movement during the use of the stocks in the shoeing operation, and, as herein shown, said locking devices 18 comprise levers 19, pivoted, as seen at 20, upon the sides of the sills 8 and having hook-shaped end portions 21, adapted, when such frames are adjusted in position for use and when the levers are thrown into the horizontal position shown in Fig. 1, to engage within staples or eyes 22, set in the floor, and preferably within recesses therein, so as to be out of the way of the sills 8 when the frames are pivotally swung away from each other. When the levers 19 are swung to engage their hooked ends 21 with said eyes 22, the frames will be securely locked in position and may be readily released by reverse movement of the levers, stops 21^a being also provided on sills 8 for engagement with the levers when reversely swung, so that when the frames are unlocked, said levers may not fall down and catch upon the shop-floor.

The construction of the adjustable rollers or travelers 17 for lifting and supporting the free ends of the frames or side portions during adjustment thereof is clearly shown in Figs. 1 and 6, and, as therein shown, the end plates 16 are separated from the ends of the sills 8 by spaces 23 along the upper sides of the sills, said plates 16 being further provided with central openings 26 and with lateral notches 25, which lead into the spaces 23, above referred to, between said end plates and the ends of the sills. 28 represents levers or handles having pivot projections 27 for turning engagement in the central openings 26 of the end plates and provided with wheels or rollers 30 at their extremities, which when said lever is horizontally extended, as seen in Fig. 1, are adapted to clear the shop-floor, but which when said levers are swung in vertical position, as seen in Fig. 6, are adapted to engage the said floor and to elevate the ends

of the frames out of contact therewith. To lock levers 28 to the end plates 16 in the use of the devices, said levers have angular projections 29, adapted when the lever is horizontally extended, as shown in Fig. 1, to come into alinement with the notches 25 in plates 16, and when in this position draft exerted upon the levers in the direction of the lengths of the frames will cause said projections 29 to pass freely through notches 25 out of the spaces 23, so that the levers or handles 28, together with their pivot projections and wheels, may be wholly disconnected from the frames. When the said levers or handles are to be again connected with the frames, the pivot projections are engaged with the central openings of plates 16, and the projections 29, being alined with the notches 25, are again passed through said notches into the spaces 23, the projections being adapted upon movement of levers 28 into vertical position to be withdrawn from alinement with said notches, whereby detachment of the levers from the sills is prevented until the levers are again horizontally positioned.

At the free ends of the frames or side portions 6 and 7 the extremities of the upper rails 9 9 thereof are also extended beyond the uprights 14 and above said extended ends of the corresponding sills 8 8, and the said uprights 14 14 of the respective frames 6 and 7 are also extended upward parallel with each other above said rails 9 9 and as seen at 32 on the drawings. Said swinging frames 6 and 7 also comprise other auxiliary uprights 33 33, parallel with the main uprights 14, but between the same and the hinge connections of said frames, these auxiliary uprights being extended upwardly above the rails 9 9 and being tied or connected with the main uprights 14 by means of auxiliary rails or braces 34 34, horizontally extended along the tops of the respective frames in alinement with the rails 9 9, but spaced apart from the same.

For holding the upper portions of the respective frames or side portions together and bracing them to afford increased strength of the structure I provide upon one of said frames a hinged brace-bar 35 of a length to adapt it to extend between the upwardly-extended portions 32 32 of uprights 14 when the frames 6 and 7 are approached in position for use, the free end of said brace-bar 35 having a series of notches 36 for detachable engagement with a stud or projection 37 on the upright of the stationary frame or member 6. By the use of this adjustable brace-bar 35 the adjustable frame or member 7 may be securely held to the stationary member 6 during use of the stocks in shoeing horses, and where the hinged construction herein shown is embodied in the stationary frame 6 I preferably provide the upper part 32 of the upright 14 of said frame with a strengthening and bracing means, herein shown as comprising an inclined prop or brace 40, the opposite ends of which have projections or pins 39, the upper pin or projection being adapted for engagement with an eye or aperture 38 upon said upwardly-extended part 32 of the upright 14, while the lower pin or projection 39 is adapted for similar engagement in an eye or aperture 42, set in the floor 2. It will of course be apparent that other arrangements of props or braces may be employed in lieu of that herein shown, and such props may be provided for use in connection with the swinging frame 7 also, if desired. The eye 42 may also be secured in the wall or ceiling of the building or shop, if more convenient.

45 indicates a halter which may be of any desired kind, having, as herein shown, a nose-strap 44, carrying attaching plates or clips 48 at opposite sides and to which are connected forwardly-extended straps or ropes 47, having rings or loops at their ends for engagement with hooks 48, set in the uppermost strip 5 upon the wall 1, said hooks being approximately above the respective frames or members 6 and 7, so that when the halter is applied for use the horse's head will be held against excessive lateral movement.

49 49 represent other rearwardly-directed straps or connections extended from the clips 48 at opposite sides of the halter and adapted to be passed over hooks 50, located at the upper parts of the auxiliary uprights 33 of the respective frames or members 6 and 7, the ends of said straps or connections 49 having loops or eyes for engagement with other rearwardly-inclined hooks 51 upon the upper auxiliary rails 34 of the respective frames, there being a plurality of such inclined hooks 51 upon each frame, so that by engaging such connections 49 with one or another of said inclined hooks the halter 45 may be adjusted forward or rearwardly, so as to exert a desired check upon the animals being shod and also to accommodate horses of different heights.

52 indicates a breast-strap which is designed to be connected with each of the frames or members of the stocks and to be passed across the space between said frames or members when the device is in position for use, so that said strap may engage upon the breast of the animal being shod to hold him from forward movement. One end of the strap 52 is, as herein shown, permanently attached to the stationary frame or member 6, while the other end thereof carries a hook 52^a, as seen in Fig. 2, adapted for detachable engagement with a hook or eye 54^a on a winding-shaft 56^a, journaled transversely of the swinging frame at a point opposite to the attachment of the strap 52 to the stationary frame 6. The swinging frame 7 is apertured to provide a chamber through which the shaft 56^a is extended and wherein the strap 52 is adapted to be wound on said shaft, so as

to adjust the length of the breast-strap to suit different requirements, and for convenient operation of said winding-shaft 56ª the same has a squared end to receive a detachable crank-handle of a well-known kind. The shaft 56ª also carries a ratchet-wheel 58ª, the teeth of which are adapted to be engaged by a pawl or detent 59ª to prevent back rotation of the shaft when the same has been turned to effect a desired adjustment of the breast-strap. When the detent 59ª is disengaged from the ratchet-teeth, shaft 56ª may be reversely turned to unwind the breast-strap therefrom, so that the same may be readily detached to permit the swinging frame 7 to be moved away from the stationary frame, so that the animal may be discharged from the stocks after being shod. A metal plate 55, extended across the aperture in frame 7, in which shaft 56ª is extended, forms a convenient bearing therefor.

53 indicates a strap or cord designed to be passed over the withers of the animal for drawing him up closely toward and against the stationary frame 6, so that excessive strain will not be imposed during struggling upon the loosely-mounted swinging frame or member 7, and said strap or rope 53 has at one end an eye or ring adapted for permanent or detachable connection with an eye or hook 54 upon a winding-shaft 56, similar to the shaft 56ª, above referred to, but extended across an opening inside a bearing-plate 55 in the frame or member 6, as seen in Figs. 1 and 2 of the drawings. Shaft 56 has a squared end to receive a detachable crank-handle 57, as seen in the drawings, and is also provided with a ratchet-wheel and detachable detent, as seen at 58 and 59, and of similar construction to the corresponding parts provided for shaft 56ª on frame 7. The ratchet and pawl serve to prevent back rotation of shaft 56 when the shoulder strap or cord 53 is thereon wound. The opposite end of the shoulder strap or cord 53 has a hook 60 for detachable connection with a ring or eye in the shop-floor 2 and located in position to stand between the frames 6 and 7 during use of the stocks. By this arrangement it will be seen that when the horse is led between the frames the shoulder-strap 53 may be thrown over his withers and the hook 60 at the free end of said strap may be engaged with the eye 61 in the shop-floor 2, after which, by turning shaft 56, the strap or cord 53 may be wound thereon, and thereby may be so shortened as to draw the animal up forcibly toward and against the stationary and braced frame or member 6, as indicated in Fig. 1. When it is desired to release the animal, the detent 59 will be disengaged from ratchet 58, so that the shaft 56 may be rotated reversely to an extent sufficient to permit strap 53 to be disengaged from the ring 61 in the shop-floor.

Upon the parallel vertical beams or uprights 32 and 33 above the rail 9 of the frame or member 6 of the stocks are bearings 62, in which are journaled the ends of a horizontal shaft or roller 63, extended parallel with but above said rail 9 and having connection, as seen at 64 in Figs. 1 and 2, with one end of a flexible sheet or apron 65 of heavy canvas or other pliant and sufficiently strong material and which is of a width substantially equal to the space between said uprights 32 and 33 of the frame. The sheet or apron 65 is adapted when the shaft 63 is turned to be wound up thereon in a well-known way, and the said sheet or apron is of a length sufficient to adapt it to be passed beneath the belly of an animal standing in the stocks and to be extended across the space intervening between the frames or members 6 and 7, the end of said sheet or apron opposite to the roller or shaft 63 being secured upon another shaft or roller 66, as seen in Figs. 1 and 3, one end of said last-named shaft 66 being adapted, as seen at 68 in Fig. 3, to be engaged in a bearing formed in the inner surface of the upright 33 of frame 7, while the opposite end of said shaft or rod 66 is adapted, as indicated at 67 in Figs. 1 and 3, to be engaged in a recess in the inner face or part of the upright 32 of said frame 7, a hook lever or detent 69, pivotally held upon the said upright 32, being adapted for engagement with said end 67 of the shaft or rod, as seen in Figs. 1, 3, and 5, for securely holding the rod or shaft 66 to the swinging frame or member 7 after the sheet or apron 65 has been adjusted beneath the animal standing in the stocks. The lever or detent 69 has a handle 70 for its convenient operation, and by reverse pivotal movement thereof the end 67 of the rod 66 may be disengaged from the recess in upright 32 of frame 7, after which the opposite end 68 of said rod may be disengaged by endwise movement from the bearing in the corresponding upright 33, so that the rod or shaft 66 will be thus disconnected from the swinging frame 7 to permit release of the animal after the operation of shoeing.

In order that the roller 64 may be rotated for winding up the sheet or apron 65 thereon, a lever 74 is mounted to swing at one end thereof, and on said end of roller or shaft 64 is secured a ratchet-wheel 71, the teeth of which are adapted to be engaged by a pawl or dog 73, carried by lever 74 in such a way as to rotate said shaft or roller 64 when the lever is pivotally swung. A disengageable detent 72 is also adapted for engagement with the ratchet-teeth to prevent back rotation during operation of the device. By this means it will be seen that after the apron 65 has been adjusted beneath the animal between the frames and the rod 66 at the free end of the apron has been connected with the swinging frame, as above described, the lever

74 may be intermittently moved or rocked, so as to cause the roller 64 to be turned, so that the apron will be wound thereon, whereby the animal will be lifted up and suspended so far as may be desirable between the frames 6 and 7. By this means the animals are prevented from crouching to hinder the horse-shoeing operation. The lever arrangement is very simple and strong and is of such a nature as to permit the animals to be lifted with but little exertion.

The respective frames or members 6 and 7 of the improved stocks are provided adjacent to the uprights 14 and upon their outer sides with metal brackets 75, which are connected with bearings 76[a] for the outer ends of winding shafts or drums 76, the inner ends of which are journaled on said uprights in any desired way. These shafts 76 are, as herein shown, similar to the winding-shafts 56 and 56[a] above described and carry ratchet-wheels 77, the teeth of which are engaged by detachable detents 78 to hold the shafts against back rotation. The shafts 76 are also provided with squared ends to receive detachable crank-handles similar to that seen at 57 in Fig. 2. Upon these winding-shafts 76, at opposite sides of the improved stocks, are adapted to be wound ropes or flexible connections 80, the opposite ends of which carry hooks or snaps and are adapted for detachable connection with rings or eyes 83, produced upon padded cuffs 84, within which are adapted to be held the horses' legs at points just above the hoof, as indicated in Fig. 1 of the drawings.

Upon the extended free ends 31 of the rails 9 of the respective frames or members 6 and 7 are held sheaves or grooved wheels 81, around which the ropes or connections 80 are adapted to be passed, as seen in Fig. 1, the free end of each connection 80 depending, as seen at 84[a] in said figure, so that its hooked end, with which the cuff 84 is connected, may be in convenient position for engagement with one of the hind legs of the horse in the stocks, whereupon by turning the corresponding shaft 76 said connection 80 will be wound on said shaft, whereby the horse's hind leg, with which the cuff 84 has connection, will be lifted, as seen in Fig. 1, into convenient position for the shoeing operation.

In connection with the cord or connection 80 and the winding-shaft 76 for lifting the horse's rear leg when connected with the eye 83 at the upper part of the cuff I provide means for holding said leg when lifted against movement, so that the animal may be prevented from kicking and struggling during the operation of shoeing, and such means, as shown in Fig. 1, comprises a cord or connection 86, the ends of which are held, by means of staples 87 or otherwise, upon the inner face of the corresponding sill 8 at suitable points at opposite sides of the sheave or roller 81, while the central part of said cord or connection 86 carries a hook 85 for detachable engagement with the eye 83 on cuff 84 opposite to that eye with which the cord 80 is connected. When the cuff has been engaged with the leg and the hooks of connections 86 and 80 are engaged with the opposite eyes 83 of said cuff, the shaft 76 may be turned to wind the connection 80 upon it, so that the leg will be lifted into position for shoeing and will be forcibly held in such position until the detent 78 is released and shaft 76 is reversely moved. When connections 86 are not in use, their hooks 85 may be engaged with eyes or staples 88 on sills 8, so that said hooks will not drag on the shop-floor and catch thereon in the pivotal or swinging movement of the frames or members.

Adjacent to the uprights 33 of the respective stationary and swinging frames or members 6 and 7 of the stocks are other grooved wheels or sheaves similar to the sheaves 81 and mounted on the outer sides of the rails 9 9, and the cords or connections 80 when not required for use in the shoeing of the rear hoofs may be carried along the rails 9 from shaft 76, as seen in Fig. 3 at 80[a], and may be passed around said sheaves 89 with hooked ends depending below rails 9 for engagement with the cuffs 84, which will thereupon be in positions for engagement with the fore legs of the animal standing in the stocks. For use in connection with the cords or connections 80 and sheaves 89 in shoeing the fore hoofs I provide flexible connections or cords 90, similar to the connections 86 above referred to and, like them, held by staples 87 upon sills 8 and provided with hooks 85 for engagement with the lower eyes of cuffs 84. Staples 91 are also provided on the sills to receive the hooks when not in use. By this arrangement it will be seen that when the fore hoof is to be shod the connection 80 will be drawn along rail 9, as indicated at 80[a] in Fig. 3, and will be passed around the sheave 89 and engaged with one eye 83 of cuff 84, the opposite eye thereof being engaged with the hook 85 on connection 90, after which the shaft 76 may be turned, as above described, to forcibly lift and hold the horse's leg during the shoeing operation. The release of the leg after the animal is shod is performed in the same way above described with reference to the shoeing of the rear hoof.

The improved stocks are also provided with means for lifting and drawing forward the fore legs, so that after the shoes are in place the rasp may be used in the ordinary way, and for effecting this result the wheels or sheaves 92 upon rails 9 of the respective frames or members 6 and 7 are employed, said sheaves being at convenient points in advance of the last-mentioned sheaves 89 and being adapted for the passage of the cord or connection 80 around them when such cord

or connection is extended in front of the sheave 89, as indicated at 80^b in Figs. 3 and 4. Below the sheaves 92 the sills 8 8 of the respective frames carry connections 93, similar to the connections 86 and 90 above referred to, and when the cord or connection 80 is carried from shaft 76 forwardly, as seen at 80^b, in advance of the sheave 89 of either frame and is passed around the sheave 92 its hooked end may be engaged with one eye of a cuff 84, the opposite eye of which will thereupon be engaged with the hook 85 of the corresponding connection 93, after which the corresponding shaft 76 being turned the rope or connection 80 will be wound thereon, so as to forcibly lift and hold the horse's hoof into an advanced position convenient for the use of the rasp.

From the above description it will be understood that the improved horseshoeing-stocks constructed according to my invention are of an extremely simple and inexpensive nature and are especially well adapted for use by reason of the security and convenience with which the animals may be held while being shod and of the readiness and despatch with which the several instrumentalities may be operated for holding the animals and also for the release thereof. The apparatus is also especially desirable for use by reason of its adjustability and of the fact that it may be so set up within a shop or building as to impose no additional or excessive strains on the walls thereof, so that strengthening of such walls to withstand such increased or excessive strains is altogether avoided. Furthermore, by the use of the improved stocks a great saving in time is effected by reason of the fact that it is possible without difficulty to apply shoes simultaneously to two of the hoofs—as, for example, one fore and the opposite hind hoof. It will also be obvious from the above description of my improvements that the improved apparatus is capable of considerable change without material departure from the principles and spirit of the invention, and for this reason I do not desire to limit myself to the precise form and arrangement of the several parts of the device herein shown in carrying out my invention.

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

1. An apparatus of the character described comprising two members spaced apart, one member being pivotally mounted for swinging movement in a horizontal plane, a traveler connected with the movable member to run upon a floor and a device carried on the movable member and adapted to be moved out of and into engagement with a reciprocal device at the floor for locking the movable member in adjusted position upon the floor.

2. An apparatus of the character described comprising two members spaced apart, one member being pivotally mounted for swinging movement in a horizontal plane and having a sill adapted, in such movement, to traverse a floor, locking means for holding said movable member in adjusted position and an adjustable traveler connected with the movable member and comprising a roller engageable on the floor and adapted, when adjusted in one position to lift said roller from the floor to permit said sill to rest securely thereon and when adjusted to another position, to raise said sill and rest the same upon said roller.

3. An apparatus of the character described comprising members spaced apart, one member being pivotally movable in a horizontal plane and having a sill adapted, in such movement, to traverse a floor, locking means to hold the movable member in adjusted position and a lever pivotally mounted on the sill and provided with a roller adapted, when the lever is pivotally swung, to engage the floor and lift the sill clear of the same.

4. An apparatus of the character described comprising members spaced apart, one member being pivotally movable in a horizontal plane and having a sill adapted, in such movement, to traverse a floor, locking means to hold the movable member in adjusted position, a plate carried by the sill with a central opening and a lateral notch, said plate having an edge portion adjacent to the notch spaced from the sill and a lever having a pivot-pin engaged in the central opening of the plate, a terminal roller adapted, when the lever is swung, to engage the floor and lift the sill clear of the same and a detent adapted to pass through the lateral notch of said plate and to engage in the space between said plate and the sill when the lever is swung.

5. An apparatus of the character described comprising a member pivotally movable in a horizontal plane and having a sill adapted, in such movement, to traverse a floor, a ring adapted to be secured in said floor and a lever pivoted on said sill with an end portion engageable with said ring to lock the member in position upon said floor.

6. An apparatus of the character described having a member mounted for movement in a horizontal plane, holding means, and a brace or prop having means for engagement with said member and also for engagement with a floor, wall or the like for holding the member against such movement.

7. An apparatus of the character described comprising spaced members one of which is movable toward and from the other, and means connected with such other member for holding an animal between said members closely against the member with which such means are connected.

8. An apparatus of the character described comprising spaced members one of which is

stationary and the other movable toward and away from such stationary member and means connected with such stationary member for drawing an animal between the members closely against such stationary member.

9. An apparatus of the character described comprising spaced members one of which is movable toward and from the other, a shoulder-strap one end of which is adapted for connection with a floor-ring or other fixed part, and a winding-shaft mounted to turn on one member and having connection with said strap to wind the same thereon when the shaft is turned.

10. An apparatus of the character described comprising stationary and movable members, a floor or other supporting-surface traversed by the movable member and provided with a fastening device, a shoulder-strap one end of which is adapted for connection with said fastening device at the floor and the other end of which is adapted for passage over the withers of an animal between the members toward the stationary member, and a winding-shaft mounted to turn on the stationary member and having connection with said shoulder-strap and adapted when the shaft is turned, to wind said strap thereon to draw the animal against the stationary member.

11. An apparatus of the character described comprising stationary and movable members, a fastening device adapted for attachment to a floor or other fixed part, a shoulder-strap having one end adapted for connection with said floor-fastening device and having its other end adapted to be passed toward the stationary member across the shoulders of an animal standing between the members, a winding-shaft journaled on the stationary member, and with which the end of said shoulder-strap is adapted for connection to wind thereon when the shaft is turned, a crank connectible with the shaft and a pawl-and-ratchet device for holding the shaft from back rotation.

12. An apparatus of the character described comprising spaced members one of which is movable toward and from the other, a roller journaled on one member, means for rotating said roller and for preventing back rotation thereof, an apron having one end connected to wind on said roller when the roller is turned and having its opposite end adapted to be passed across the space between the members and beneath an animal standing between the members and a rod secured upon the said opposite end of said apron and having means for detachable engagement with the movable member.

13. An apparatus of the character described comprising a member, means for holding an animal to be shod alongside said member, a winding-shaft journaled on the member, sheaves held to turn on the member at opposite sides of the winding-shaft, and a flexible connection arranged to wind on said shaft and adapted to be extended over either of said sheaves.

14. An apparatus of the character described comprising a member, means for holding an animal to be shod alongside thereof, a winding-shaft journaled on the member, a flexible connection arranged to wind on said shaft and adapted to be connected with an animal's leg and a plurality of sheaves spaced apart along said member and over each of which said flexible connection is adapted to be passed for connection with fore and hind legs of the animal to be shod.

15. An apparatus of the character described comprising a member alongside which an animal to be shod is adapted to be held and having parallel parts, sheaves held to turn on one of the parts, a winding-shaft mounted to turn, a flexible connection coupled to said shaft and arranged to be wound thereon and adapted to be passed around either of said sheaves, other flexible connections held to the other parallel part of said member opposite the respective sheaves and a cuff adapted for detachable connection with the animal's leg and having means for detachable connection with each of said flexible connections.

16. An apparatus of the character described comprising spaced members, a roller carried on one member and adapted to be turned, means for holding the roller against back rotation, an apron one end of which is connected to wind on said roller and the other end of which is arranged to be passed across the space between the members and is provided with a bar having projecting end portions, uprights on the other member, one of said uprights having an aperture to receive one of the projecting ends of said bar and a detent-lever carried on the other upright and having a hooked end adapted, when the lever is pivotally moved, for detachable engagement with the other projecting end of said bar.

MARTIN L. HEMPHILL.

Witnesses:
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