W. M. CONOVER.

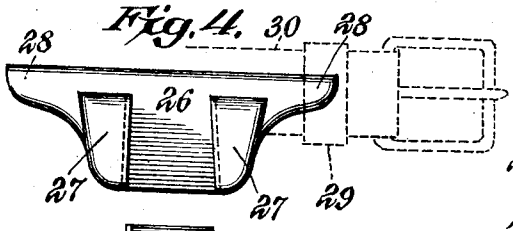
STITCHING HORSE.

APPLICATION FILED MAR. 12, 1919.

1,331,487.

Patented Feb. 24, 1920.

Fig. 4.



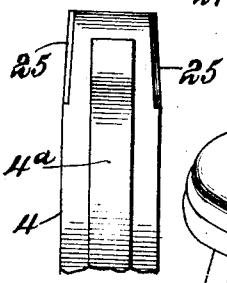


Fig. 1.

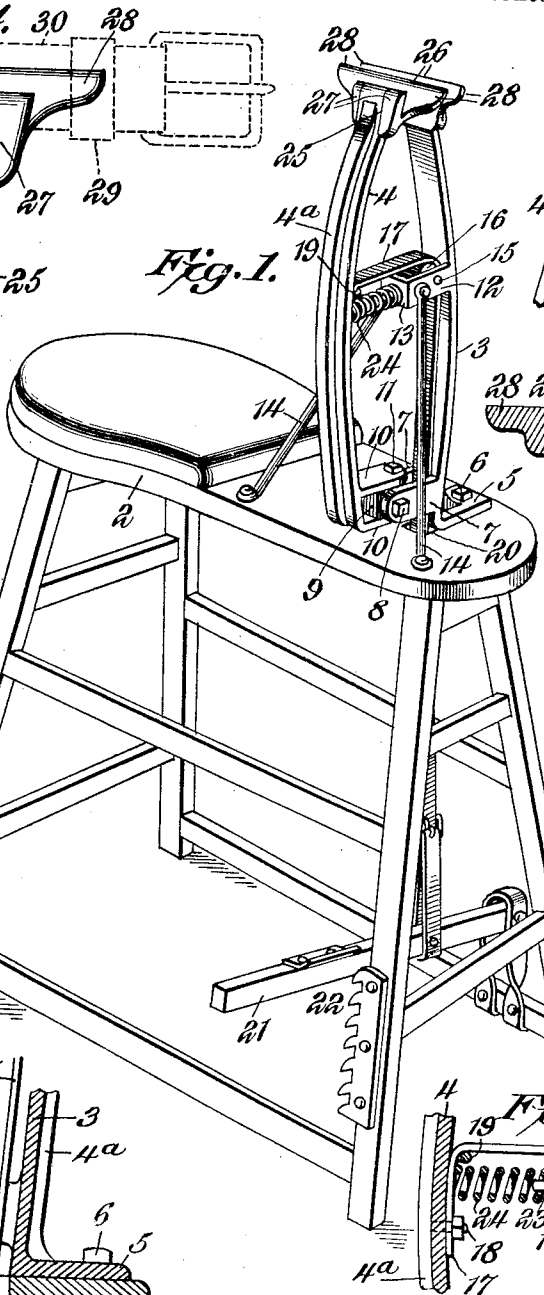


Fig. 5.

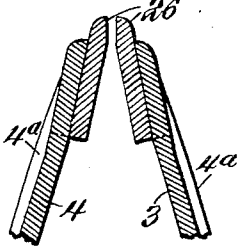


Fig. 6.

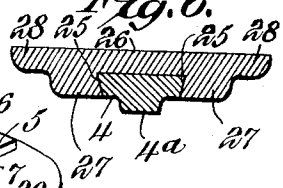


Fig. 2.

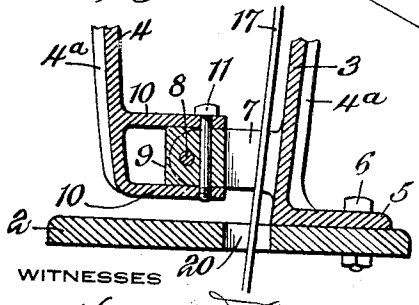
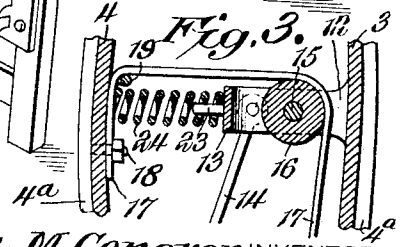


Fig. 3.



WITNESSES

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STITCHING-HORSE.

1,331,487. Specification of Letters Patent. Patented Feb. 24, 1920.

Application filed March 12, 1919. Serial No. 282,204.

To all whom it may concern:

Be it known that I, WILLIAM M. CONOVER, a citizen of the United States, residing at Gettysburg, in the county of Adams and State of Pennsylvania, have invented a new and useful Stitching-Horse, of which the following is a specification.

This invention relates to stitching horses.

The object is to provide a device of this character, for use by harness makers or others, whereby it is possible to securely hold material of uneven thickness for the purpose of stitching the same, by the provision of peculiarly swiveled clamping jaws, said jaws being so arranged as to be capable of approaching each other closer at one end than at the other, or vice versa.

Another object is to provide a stitching horse having jaws which may be readily removed from the clamping arms of the device when it is desired to use the same as in the ordinary forms of such devices or applied in position when desired.

A further object is to provide detachable clamping jaws for stitching horses which may be used to clamp the loose ends of retaining loops of straps, belts, etc., adjacent to the buckle for the purpose of facilitating the stitching thereof.

A full and complete understanding of the invention may be obtained from a consideration of the following detailed description, taken in connection with the accompanying drawing, forming a part of this specification, it being understood that, while the drawing shows a practical form of the invention, the latter is not confined to strict conformity therewith, but may be changed or modified, so long as such changes or modifications mark no material departure from the salient features of the invention as specifically pointed out in the appended claims.

In the drawing, in which like reference characters designate corresponding parts throughout the several figures.

Figure 1 is a perspective view of a stitching horse having the improvements applied thereto;

Fig. 2 is a detail sectional view, drawn on a larger scale, and illustrating the double swivel connection between the clamping arms;

Fig. 3 is a similar view illustrating the means for forcibly drawing the clamping arms together;

Fig. 4 is a detail view of the upper end of one of the arms and the removable jaw in separated position and showing its application to the buckle end of a strap or belt;

Fig. 5 is a detail sectional view of the opposed clamping jaws and their connection to their respective arms, and

Fig. 6 is a detail sectional view taken horizontally of the jaw and arm.

In the drawing, there is illustrated a horse 1, constructed in the ordinary manner, comprising a seat 2, supported on legs, and suitably braced to render the same strong and substantial. The seat is preferably padded at one end and is somewhat reduced at its opposite end in the usual manner and is there provided with a pair of coacting clamping arms 3 and 4, extending upwardly a suitable distance and adapted to hold articles being sewed or stitched.

The arms or members 3 and 4 are preferably formed of suitable cast metal, and are provided throughout the major portion of their lengths with longitudinally disposed beads or ribs 4^a in order to give the same the necessary strength without adding materially to their weight. The arm 3 is formed with an integral foot 5, extending laterally and suitably apertured for the reception of a fastening bolt 6 to secure the same rigidly to the seat and transversely thereof, the said foot extending outwardly toward the edge of the seat 2.

Adjacent to the foot 5, and extending in the opposite direction thereto, are a pair of inwardly directed ears 7—7 each extending from the opposite edges of the arm 3 and provided with alined apertures for the reception of a horizontally disposed pivotal bolt 8, which also traverses a suitable bore formed in a pivotal block 9, mounted between the ears 7—7 and adapted to rock about said bolt 8.

The opposite arm 4 which, like the arm 3, is slightly bowed outwardly throughout its length, is also provided with a pair of ears 10—10 arranged one above the other in spaced relation, and adapted to fit upon the upper and lower faces of the said block 9

and to extend inwardly beyond the bolt 8, where they are provided with suitable, vertically alined apertures for the reception of a second pivotal bolt 11, which also traverses a suitable bore formed in the block 9 and is disposed at right angles to the bolt 8. It will thus be seen, that the arm 4 is pivotally mounted on the arm 3, for a vertical swinging movement about the bolt 8 as an axis, whereby the upper free end of the said arm 4 may be caused to move toward or away from the upper free end of the stationary arm 3; or, by reason of the vertically mounted pivotal bolt 11, the said upper end of the arm 4 may assume a position out of alinement with or angularly to the adjacent end of the arm 3 so as to readily adapt itself to any article of uneven thickness being held between the said arms.

Substantially midway of the height of the arm 3, there is provided spaced arms 12 formed integrally with the said arm and similarly to the ears 7—7, extending toward the arm 4, and joined at their inner ends with a wall 13, thereby forming a loop, the arms 12—12 being suitably braced by inclined rods 14—14 secured thereto and extending outwardly and screwed or otherwise secured to the seat 2 in straddling relation to the arm 4.

Mounted on a bolt 15, carried by the arms 12, is a horizontally disposed roller 16, located adjacent to the stationary arm 3, and over which is adapted to operate a strap 17, having one end secured to the movable arm 4, as by a bolt 18, and passed upwardly and against the inner side of said arm, thence through a staple 19 and horizontally across the space between the two arms and over the roller, thence downwardly between the arms 7—7 through an opening 20 formed in the seat 2, and below the seat, where said strap is secured to a foot lever 21, suitably mounted upon the leg structure for up and down movement and having locking means 22 to hold the same in adjusted position in a well known manner.

The wall 13 is provided with a pin 23, directed toward the movable arm 4 and adapted to project into and to hold in position a coiled spring 24 which extends across the intervening space and bears against the strap where arranged along the inner side of the said arm 4. The spring tends at all times to force the upper free ends of the arms 3 and 4 away from each other.

At their upper ends the arms 3 and 4 are each slightly tapered, as indicated in Fig. 4 of the drawing, and have their tapered outer edges formed into dovetails 25. Removable jaws 26 are each provided with a pair of spaced lugs 27 on their outer faces, said lugs having their opposed faces tapered and dovetailed to correspond to the upper ends of the arms 3 and 4, which, when the jaws are placed thereon, securely hold the same in position, the joint being such as to prevent any wabbling action of the said jaws, and, at the same time, permitting the jaws to be easily removed therefrom, so that the upper ends of the arms may be used to hold articles as in the case of the ordinary stitching horse.

The jaws 26 are each provided, beyond the lugs 27, with outwardly extending, reduced projections 28, one of which may be introduced beneath the keeper loop 29 of a strap or belt 30, which is then held in spaced relation to the main portion of said loop and between the two coacting jaws, when the action of the operator in stitching is greatly facilitated, as illustrated in dotted lines in Fig. 4 of the drawing.

From the foregoing, it will be seen that a simple, cheaply manufactured and durable stitching horse has been provided, wherein the coacting clamping jaws are pivotally connected by a substantially universal joint which permits of straps, belts, portions of harness or other articles often having portions of uneven thicknesses, to be held without movement between readily removable or interchangeable jaws.

What is claimed is:—

1. A stitching horse comprising a seat having relatively movable upright clamping arms mounted thereon, one of said arms being provided with an attaching foot secured to said seat, and spaced ears directed toward the other arm and arranged side by side and above said foot, the other arm being provided with spaced ears at its lower end arranged one above the other and directed toward the first-named arm, a block mounted between the adjacent free ends of the several ears, a horizontal pivotal bolt traversing the block and the first-named ears to permit the arms to swing apart, and a vertical pivotal bolt traversing the said block and second-named ears to permit articles of uneven thickness to be held between the active ends of the clamping arms.

2. The combination with a pair of relatively movable clamping arms or members, one of said arms or members being rigidly mounted in position, and means for pivoting the other arm or member thereto, said pivoting means including a pair of pivots disposed at right angles to each other, one pivot being a horizontal pivot and the other a vertical pivot.

3. The combination with a pair of relatively movable clamping arms or members, one of said arms or members being rigidly mounted in position, and means for pivoting the other arm or member thereto, said pivoting means comprising a pair of ears on each arm or member, a block between

the ears, and a pair of bolts traversing the ears and block and arranged at right angles to each other.

4. A stitching horse comprising clamping arms having their free ends tapered and beveled to form tongues constituting clamping jaws, and removable clamping jaws provided on their outer faces with spaced lugs having their opposed faces undercut and tapered and adapted to receive therebetween the said tongues and to be supported thereby, the said removable jaws having reduced extended portions at each side.

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

WILLIAM M. CONOVER.

Witnesses:

C. N. WILSON,

JACOB A. APPLER.