

(No Model.)

H. DOERING.
STITCHING HORSE.

No. 474,041.

Patented May 3, 1892.

Fig. 2.

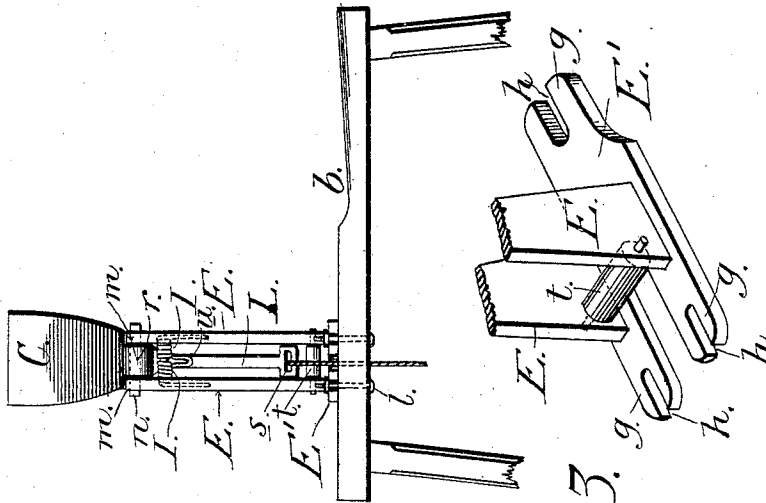


Fig. 3.

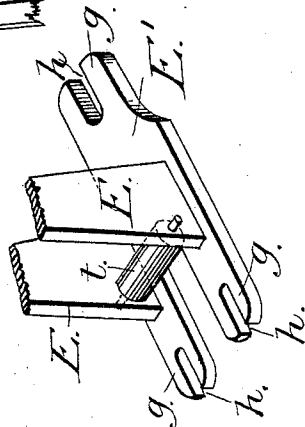
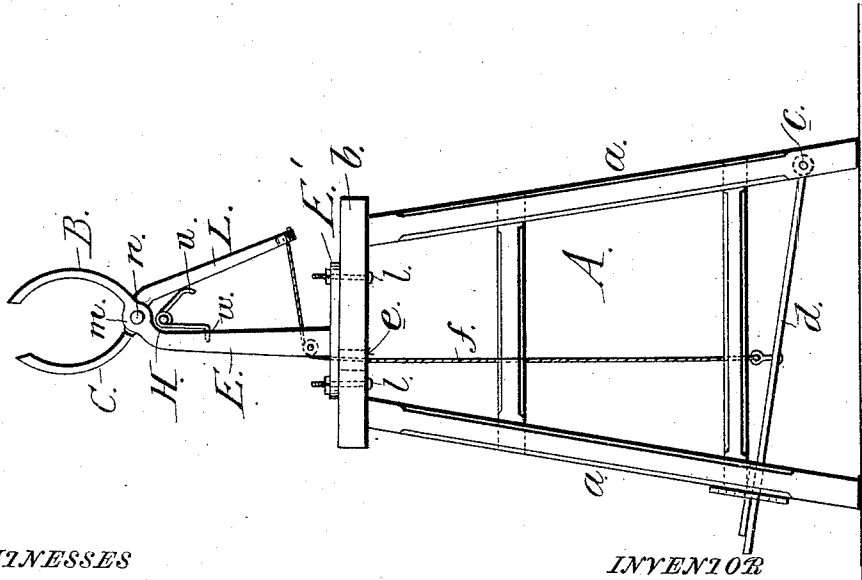


Fig. 1.



WITNESSES

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STITCHING-HORSE.

SPECIFICATION forming part of Letters Patent No. 474,041, dated May 3, 1892.

Application filed January 13, 1892. Serial No. 417,947. (No model.)

To all whom it may concern:

Be it known that I, HERMAN DOERING, a citizen of the United States, residing at Reedsburg, in the county of Sauk and State of Wisconsin, have invented certain new and useful Improvements in Stitching-Horses, as set forth in the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side elevation of a stitching-horse embodying my invention. Fig. 2 is an end view of the same. Fig. 3 is a detail to be referred to.

My invention relates to the class of machines for stitching leather articles—such as harness—and commonly known to the trade as “stitching-horses;” and my invention consists of the construction and combination of devices which I shall hereinafter fully describe and claim.

To enable others skilled in the art to which my invention appertains to make and use the same, I will now describe its construction and indicate the manner in which the same is carried out.

In the said drawings, A represents a suitable frame-work, comprising the supporting-legs *a*, the operator's seat *b*, and a rock-shaft *c*, to which the operating foot-lever *d* is secured.

In the seat portion *b* is formed an opening *e*, through which passes a rope, chain, or other connection *f*, whose upper end is secured to the movable jaw of the device and whose lower end is secured to the lever, so that when the foot-lever is depressed the connection acts upon the movable jaw to cause it to approach the fixed jaw.

The jaws B and C, between whose gripping-edges the material is passed, are of peculiar construction, and each is formed with a curved upper portion or head, whose meeting edges are beveled to insure a tight grip upon the piece of leather or article placed between them. The jaw B is the fixed jaw, and is formed with integral arms E, extending downward in vertical planes parallel with each other. These arms E form the bifurcated standard, and upon which the jaws are supported and whose lower end is formed with a horizontal base-plate E', which rigidly unites the two jaws and forms a base or stand, by

which the device is secured to the seat portion of the main frame.

In order that the standard and the jaws may be readily detached from the main frame and raised to higher elevations when desired by the introduction beneath the base-plate of a block, I form the said base-plate with feet *g*, having slots *h*, (see Fig. 3,) through which and the seat portion of the frame bolts *l* are passed. This construction enables me to adjust the height of the jaws to suit the operator.

Near the junction of the separated arms or standard with the curved jaw portion hubs or bosses *m* are formed to receive the pin or bolt *n*, which serves to unite the fixed jaw with its companion movable jaw and forms the pivot about which the latter jaw moves. The movable jaw has its curved portion formed like the similar portion of the fixed jaw, and it has a single-arm extension L, which is adapted to pass through and play between the bifurcated standard of the fixed jaw, said movable jaw having a hub portion *r*, through which the pivot bolt or pin *n* passes. At the lower end of the movable jaw C an eye *s* is formed for the securing of one end of the rope or chain connection *f*, and within the lower portion of the bifurcation of the fixed standard is mounted a roller *t*, over which the connection *f* passes to the foot-lever.

In order that the jaws may be forced apart after the foot-lever is released, I employ a spring H of peculiar form, and locate this spring between the fixed bifurcated standard and the arm L of the movable jaw at a point just below the point of pivotal connection of the two jaws. This spring H is made of a single piece of heavy spring wire bent upon itself to form a foot or bearing *u*, and then the ends are carried upwardly and form the coils I, after which the ends are bent downwardly along the rear side of the arms of the fixed standard and their extremities fitted in openings *w* in said arms. This construction and disposition of the spring keeps the jaws normally open, but yields to permit their closing when the foot-lever is depressed.

From this description it will be seen that the present invention is very simple and effective in its operation. The fixed jaw is in-

tegral with its slotted standard and the movable jaw has its integral arm adapted to enter the bifurcation of the standard of the fixed jaw, so that it takes up no great amount of room. Nothing in the structure is liable to derangement, and the whole device above the seat-frame is made of but three essential parts, which, with the exception of the spring, may be cast to cheapen the cost of manufacture.

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

1. A stitching-horse comprising a fixed jaw having an integral bifurcated standard detachably secured to a main frame, a roller within the lower portion of said bifurcation, a movable jaw pivotally secured in the upper portion of the bifurcation and having a single arm extending through the latter, a spring for actuating the movable jaw, and a flexible connection extending from the lower end of

said arm over said roller to the power device, substantially as herein described.

2. In a stitching-horse, the main frame and operating foot-lever, the fixed jaw having an integral bifurcated standard, a base-plate integral with the standard and provided with slotted foot portions, bolts detachably uniting the standard with the main frame, a movable jaw pivotally held within the bifurcation of the standard and having a lever-arm extension, a spring for holding the jaws open, a guide-roller in the base of the standard, and a flexible connection secured at one end to the arm of the movable jaw, passing over said roller, and having its opposite end secured to the foot-lever, substantially as herein described.

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Witnesses:

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