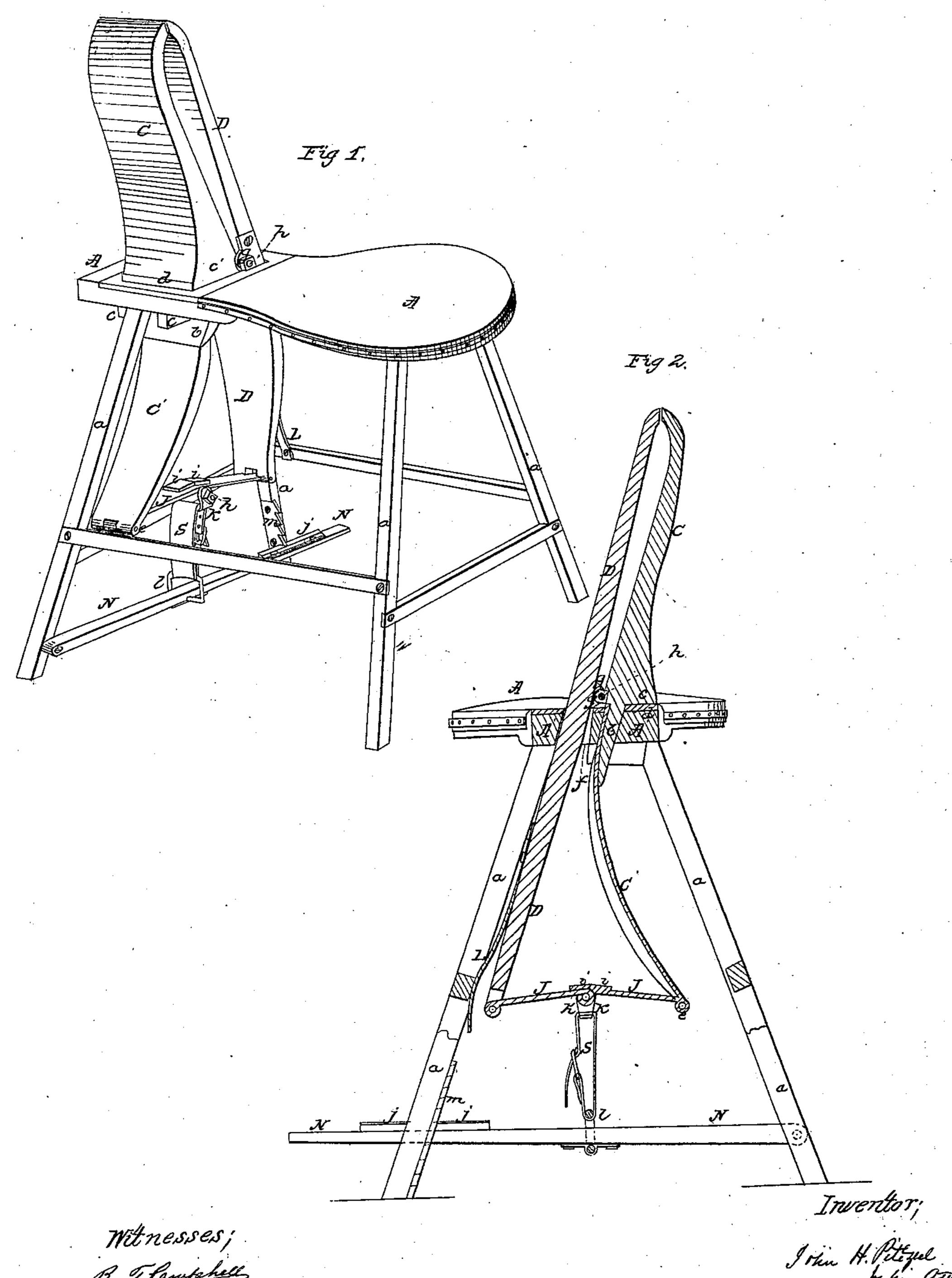


Harness Tool,

M=42,020,

Patented Mar. 22, 1864



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JOHN H. PITEZEL, OF THREE RIVERS, MICHIGAN.

SADDLER'S STITCHING-HORSE.

Specification forming part of Letters Patent No. 42,020, dated March 22, 1864.

To all whom it may concern:

Be it known that I, John H. Pitezel, of Three Rivers, county of St. Joseph, State of Michigan, have invented a new and Improved Stitching-Horse; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is a vertical transverse section through the jaws of the horse and the parts employed in holding and operating these jaws.

Similar letters of reference indicate corre-

responding parts in both figures.

This invention relates to an improvement in machines known as "stitching-horses," which are used by saddlers and trimmers for holding their work during the operation of stitching it by hand; and it has for its object an improved mode of arranging, supporting, and operating the clamping-jaws of the horse, so that there will be less labor required to confine the work securely between said jaws or to release the same therefrom, as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its con-

struction and operation.

The frame or horse, on which the workman sits astride to work at the machine, and to which the clamping-jaws are affixed, consists of an oblong or oval shaped seat, A, having a forward extention, A', which is a little on one side of a central line drawn longitudinally through the seat proper, for the purpose of bringing the inclined clamping-jaws in a more convenient position for the workman. This seat is supported by four legs, a a, which are of such length as to allow the workman to operate the jaws by means of a treadle, and also to sit comfortably upon the machine.

C D represent two clamping-jaws, which are curved in such manner as to receive the work between them and to clamp it between their upper edges. One of these jaws, C, is secured rigidly to the extended portion A' of the seat A by forming a tenon or tongue, b, on the lower end of this jaw, and passing this tongue through an inclined hole which is made through A', as shown in Fig. 2, and then securing the jaw in position by the transverse keys c c,

which pass through that portion of the tongue extending below the table. These keys, together with a shoulder which is formed on the jaw at c', will give steadiness and rigidity to the jaw, and in order to prevent the same from working loose in consequence of a long use of the machine this jaw is further strengthened in its support by seating the shoulder c' upon a metal plate, which is let into the surface of A'. When the jaw C is made of metal, a flange will be formed on it answering the purpose of the bearing plate d and shoulder c'. To the lower end of this fixed jaw C, I rigidly attach a curved extension or arm, C', which has an eye formed on its end to receive a pintle, e, and to form a hinge-joint for one of the toggle-levers, which are used to operate the pivoted clamping-jaw D, as will be hereinafter described.

The jaw D is nearly straight, except at its upper biting end, where it is curved so as to correspond with the curve of the opposite jaw C, and this jaw passes freely through a wide. slot, f, through the extension A', and extends beneath this extension a sufficient distance to allow it to be operated by toggle-levers, which are connected also to the lower extension, C', of jaw C. On each edge of the jaw D, just above the surface of the table A', I firmly secure an ear-plate, g, having holes through them, which, when the two jaws are in their proper position, exactly register with corresponding ear-plates, g', affixed to the jaw C. Through these ears I pass a bolt, h, and thus form a hinge attachment of the jaw D, with jaw C, which will allow the former to vibrate laterally a sufficient distance for all practical purposes. To the lower end of jaw D, and to the corresponding end of the extensionarm C', I pivot the jointed or toggle levers J J, which are furnished on their upper surfaces, near their contiguous ends, with plates i i, which abut when the joints have been depressed as far as can be done with safety, and thus keep the central joint always in a position to move upward, when the upper end of the jaw D is forced outward; or, in other words, these abutting plates i i prevent the central joint or knuckle from being depressed below a plane passing through the outer joints of these plates J J. To the bolt h' of these toggle-joints I attach a loop, k, and below

this loop is a pivoted staple, l, which is attached to a treadle, l. The center of the tog gle joints are connected to the treadle l by means of a strap and buckle, l, so that the workman sitting upon the horse can operate the toggles and close the jaws by depressing the outer or free end of the treadle, the jaws being opened again upon releasing the treadle by the spring l, which acts upon the lower end of the hinged jaw l.

It is desirable to keep the jaws closed during the operation of stitching, and to this end I secure a catch-plate, j, to the treadle in such a position as to catch into one or the other of the teeth m of a plate which is secured to the leg of the machine, as shown in Figs. 1 and 2, and by allowing the treadle to have a slight lateral play the workman with his foot can engage or disengage the treadle with the teeth

m at pleasure.

What I claim as my invention is—

1. The combination of fixed and pivoted jaws CD, with the toggle-joints J J, treadle

N, and strap-connection S, constructed and operating substantially as described.

2. Hinging the movable jaw D to a jaw, C, which has an extension-arm, C', in combination with the toggle-levers constructed and operating substantially as described.

3. Providing for attaching the two jaws C D to the seat by a single fastening, substan-

tially as described.

4. The two extended arms of jaws C D, in combination with the toggles J J, strap-connection S, treadle N, toothed plate m, catchplate j, and spring L, all operating substantially as described.

Witness my hand in the matter of my application for a patent for an improved stitching-horse for the use of saddlers, harness

makers, and trimmers.

JOHN H. PITEZEL.

Witnesses:
SAM. CHADWICK,
JNO. HUTCHISON.