(No Model.)

C. D. SNELL.

SAWHORSE.

No. 522,862. Patented July 10, 1894.

Fig 1.

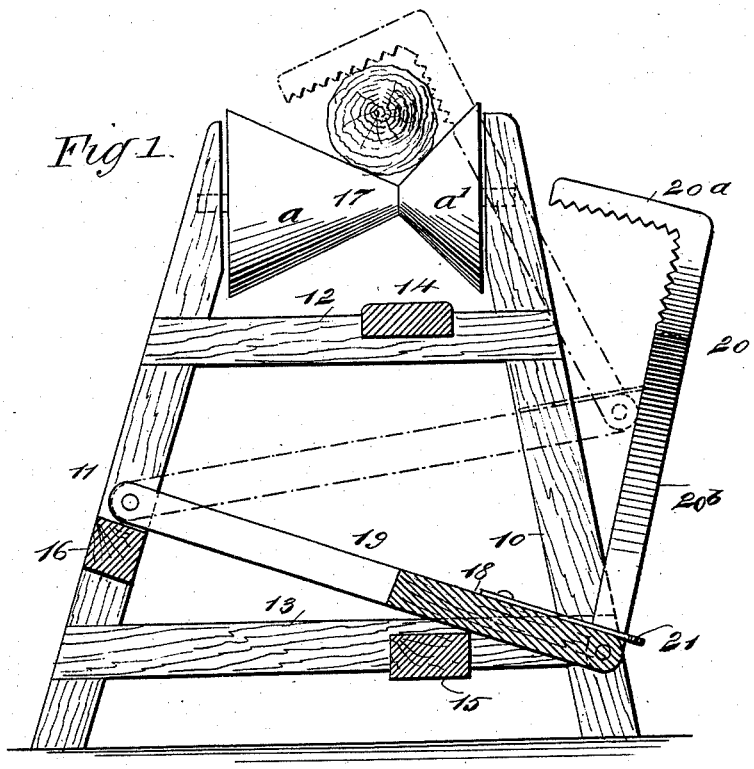
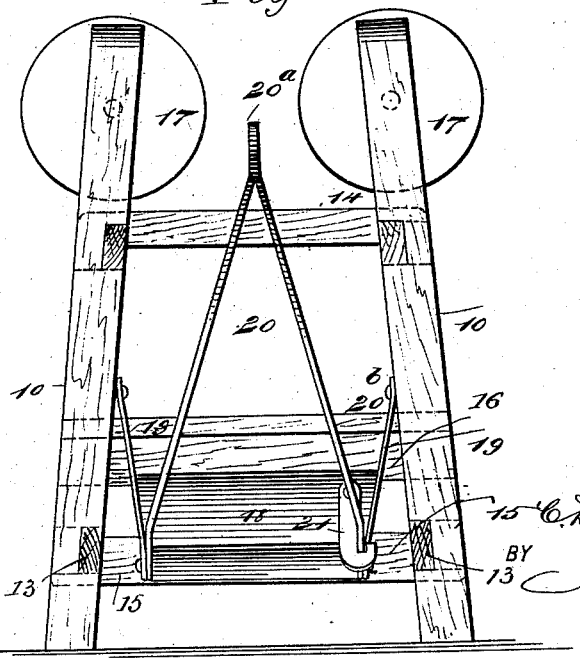


Fig 2.



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SPECIFICATION forming part of Letters Patent No. 522,862, dated July 10, 1894.

Application filed March 2, 1894. Serial No. 502,025. (No model.)

To all whom it may concern:

Be it known that I, CHARLES D. SNELL, of Oxford, in the county of Oxford and State of Maine, have invented a new and Improved Sawhorse, of which the following is a full, clear, and exact description.

My invention relates to an improvement in saw horses, and it has for its object to construct a horse in such a manner that the log to be sawed may be adjusted endwise with one hand whether the log be heavy or light.

A further object of the invention is to so construct the bearings for the log that it will also be held in a position to be conveniently reached by the sawyer at all times.

Another object of the invention is to provide a clamp capable of being operated by the foot of the sawyer, and which when brought into action will permit the sawyer to stand substantially erect, and to use both hands with perfect freedom in the action of sawing, the clamp serving to hold the log being sawed, firmly upon the horse.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in both views.

Figure 1 is a vertical central section through the improved saw-horse; and Fig. 2 is a front elevation thereof.

In the construction of the frame of the saw horse each side consists of two uprights 10 and 11, both uprights being given an upward and inward inclination, but the inclination of the front upright 10 is less than that of the rear upright 11. These two uprights are connected by tie bars 12 and 13, located near the bottom and near the top. The sides thus formed are connected by an upper cross bar 14, preferably secured to the upper tie bars 12, and also by a lower cross bar 15 and a rear cross bar 16. In this manner the frame is rendered exceedingly substantial, and is much narrower at the top than at the bottom, enabling it to stand in an exceedingly steady manner, especially so by reason of the back of the frame having more of an inclination than the front.

Between the upper ends of the standards 10 and 11 of each side section of the frame a supporting roller 17 is journaled. Each supporting roller is of like construction, and is made in the shape of two frustums of a cone connected at their converging ends, the rear conical section a being much longer than the forward conical section a', so that conical surfaces have different inclinations and the log, when located upon the rollers, will be maintained nearer the front of the frame than the rear. Owing to the portions a and a' having different inclinations, the upward motion of the log on the section a' will be effectively prevented while the log may be readily turned in one direction.

A platform 18, is pivotally located at the front lower portion of the frame between the side sections thereof, and the said platform when not in use will rest upon the lower cross bar 15, as shown in Fig. 1. Usually this platform is provided with two rearwardly extending arms 19, one located at each side, and the arms are carried rearward and are pivoted to the inner faces of the rear uprights 11.

The clamp 20 employed consists of an angular or L-shaped head section 20^a, toothed or serrated upon its under surface, the horizontal member of the head extending in direction of the rear of the frame, and a foot section 20^b, said section being bifurcated as shown in Fig. 2, and the members of this section are pivotally connected with the front of the platform 18, one at each side. The clamp is held in substantially a vertical position, having a slight outward inclination when not in use, through the medium of a hook 21, pivoted upon the platform and adapted for engagement with a member of the foot section of the clamp. Two such hooks may be employed, or an equivalent of the hook may be employed instead.

In the operation of sawing, the log is placed upon the supporting rollers 17, as shown in Fig. 1, and the clamp is raised, carrying with it the platform, until the toothed surface of the head of the clamp engages with opposite sides of the log near the top thereof, whereupon a weight of any description may be

placed upon the platform to hold the clamp in binding engagement with the log and the log firmly upon the rollers; or the platform may be made sufficiently heavy to accomplish this result; or the position of the platform when the clamp is in engagement with the log may be such that the sawyer can bear upon the platform with one foot, throwing a portion of his weight thereon, while manipulating the saw. Thus in any event both arms of the sawyer will be left free, and his full strength may be brought to bear upon the work in hand.

It is evident that under the above construction the log will not slip from the rollers, and may be manipulated over the rollers very readily by the use of but one hand, and that the clamp is capable of use in connection with a log of any size.

The platform and clamp are to be operated by the foot of the sawyer, thus leaving one hand free to hold the saw while the other is used to move the log.

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

1. A saw horse provided with a roller adapted to support a log to be sawed, said roller comprising two conical surfaces connected at their apexes, one surface being of greater inclination than the other, as and for the purpose specified.

2. A saw horse provided with rollers journaled therein adapted to support the log to be sawed, the said rollers comprising two conical surfaces connected at their apexes, the conical surfaces being of different inclinations, the surface of greater inclination being located at the front of the horse, substantially as and for the purpose set forth.

3. In a saw horse, the combination, with a frame, the front and rear whereof are inclined from the bottom upward and inward, the inclination at the back being greater than that at the front, of supporting rollers adapted to sustain the log to be sawed, and journaled in the upper portion of the frame, the length of the rollers being in direction of the front and rear of the frame, a platform pivoted to the frame and extending to the front thereof, and a toothed clamp carried by the platform and adapted for holding engagement with the log to be sawed, as and for the purpose specified.

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