Dec. 9, 1930. A. T. TIDBLAD 1,784,321

CENTERING AND GUIDING DEVICE

Filed June 27, 1927

Fig. 1.

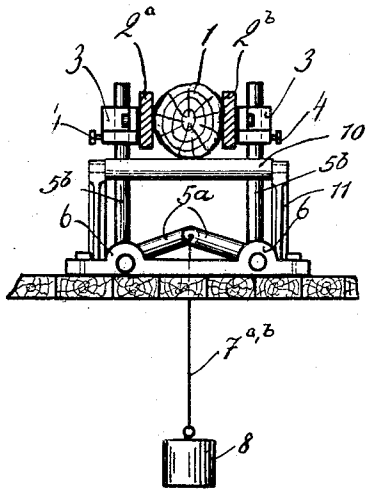


Fig. 2.

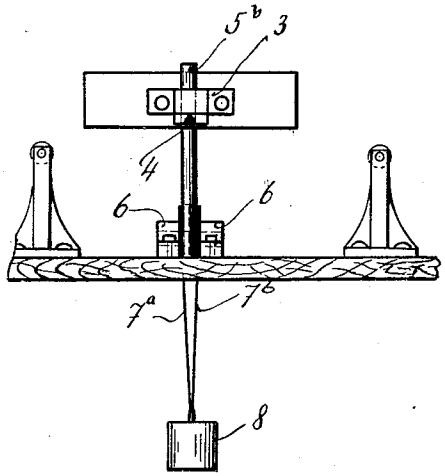
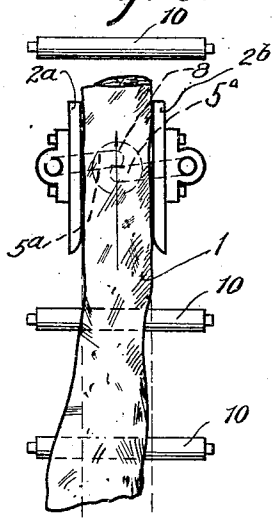


Fig. 3.



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Patented Dec. 9, 1930

1,784,321

UNITED STATES PATENT OFFICE

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CENTERING AND GUIDING DEVICE

Application filed June 27, 1927, Serial No. 201,865, and in Sweden July 6, 1926.

This invention has for its object a device for centering and guiding the timber in frame-saws, where guides are used on each side of the path of the log, the said guides being adjusted for holding the log centrally relatively to the saw-frame and each of them yielding, considered in the transverse direction of the path, so that when bends and the like of the log pass by the guides, that guide only, which meets with the bend and the like is yielding in order that the log may be maintained in the central position.

An embodiment of the device is shown diagrammatically in the accompanying drawing, where Figures 1, 2 and 3, respectively, are an end-view, a side-view and a plan-view of same.

In the drawing 2*a* and 2*b* are two guide bars constructed according to the invention and mounted on each side of the path of the log in which a log 1 is presumed to be moved forward on rollers 10 supported by frame bearings 11. The guide bars are pivoted each on a standard 5*b* by means of bearings 3 and each guide rests on a ring 4 adapted to be raised and lowered. In this embodiment each standard 5*b* forms one arm of a bell crank lever mounted in a base-plate, the said arm being turned upwards, the other arm 5*a* of the said bell crank lever being turned laterally and loaded with a counterweight 8 common to both levers and connected with them by means of a rope or chain 7*a* and 7*b* passing to each arm 5*a*. By this arrangement the guide bars become movable in relation to each other and are yielding to the pressure of the log so that the guide bar meeting with and yielding to an unevenness and the like of the log acts upon the log by a pressure acting towards the path of the log, while the guide bar on the opposite side does not act upon the log at that time.

When the device is to be used the arms 5*a* and 5*b* are adjusted according to the dimension of the log to be sawed, in such a manner that the distance between the guide bars becomes at least as large as the top diameter of the log, that is to say, then they cannot come nearer to each other. This adjustment may be effected either by simply putting something beneath the arms 5*a* and the weight 8 respectively, which may then serve as a stop, or by mounting any common screw device or the like between the arms 5*b*. If the log is straight the loading becomes equal on both arms, whereby the log is moved forward centrally in relation to the saw-frame. In case the log is curved, for instance as shown in Figure 3, the pressure of the log becomes greater on the guide bar 2*a* than on the guide 2*b*. The former then yields and the appertaining arm 5*a* raises the weight 8. Then the guide bar 2*a* only is loaded by the weight 8 and therefore it forces the log to travel in the middle of the path. If the curvature was turned in the opposite direction the guide bar 2*b* would assume the function described above of the guide bar 2*a*.

Evidently, the invention may be carried out even in other manners without the idea underlying the same being given up.

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

A centering and guiding device for timbers in saw frames and the like, comprising guide bars for the log arranged on each side of the path of movement of the log and opposite to one another, means for supporting said guide bars to permit them to move towards and from each other, comprising pivotally mounted bell crank levers, the upper arms of which support the bars; the other of said arms of said bell crank levers extending laterally towards each other, a weight common to both levers and cable connections between the weight and both levers whereby a guide bar meeting with a bend or the like in a log moves the log by virtue of the weight towards the median line of the path of movement of the log, while the guide bar on the opposite side of the log is inactive upon the log through the weight at that time.

In witness whereof, I have hereunto signed my name.

ANDERS TYCHO TIDBLAD.