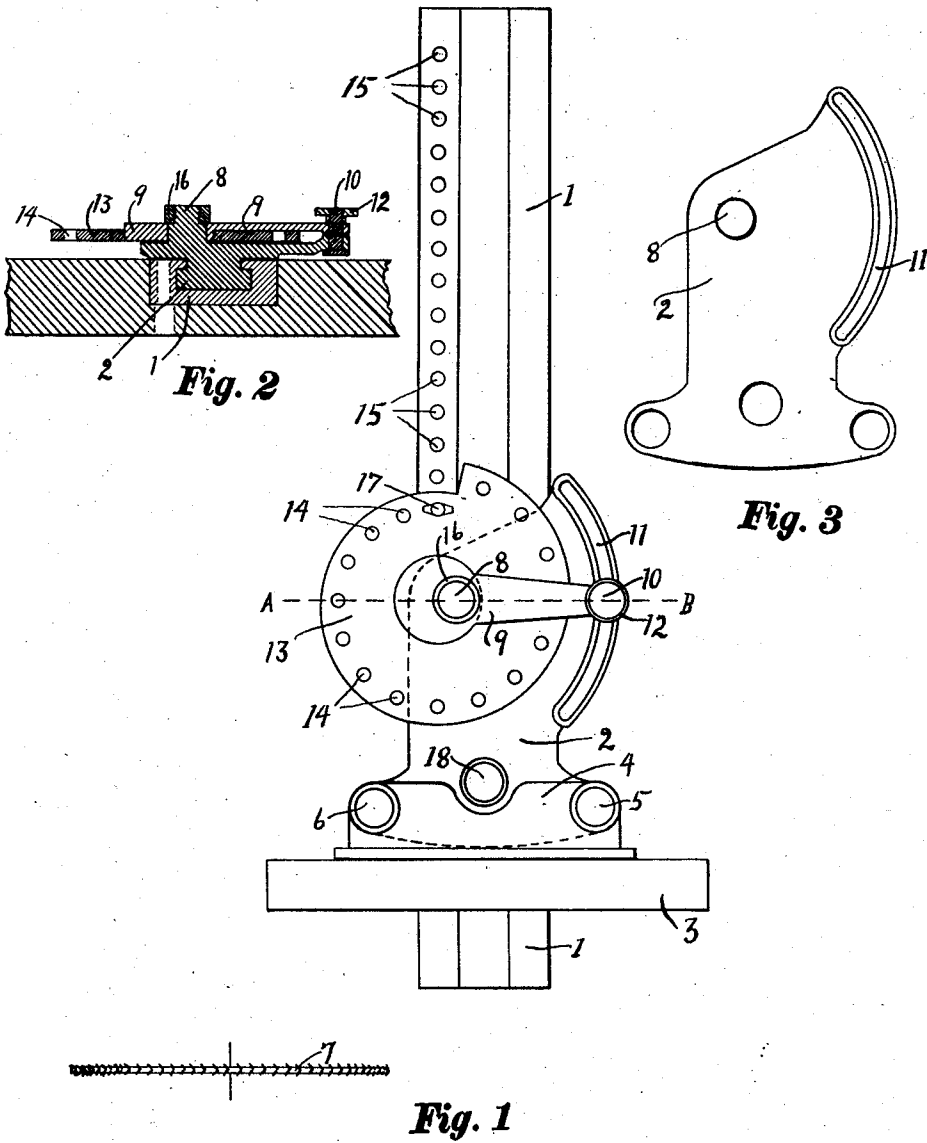


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SAWING GUIDE.
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997,463.

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SAWING-GUIDE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, VICTOR A. McWOLD, a citizen of the United States, and a resident of the city of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Sawing-Guides, of which the following is a specification.

My invention relates to sawing guides for use on saw tables where it is desired to saw lumber to certain widths or lengths, one side or end of the piece to be sawed being pressed against the guide bar of the sawing guide which has been set at a predetermined distance from the saw by means of a measuring device on the sawing guide.

The objects of my invention are to provide a simpler sawing guide than any now in use; to make a guide that is more simple and positive in its operation and that by consisting of fewer parts may be made cheaper and sold at a lower price than those now on the market.

My sawing guide may also be set for any desired measurement and adjusted to the correct relative position to the saw much quicker than any now in use and by employing the periphery of a large eccentric for the bearing of the measuring dial the useful life of the device is lengthened as the large bearing wears slowly and the accuracy of the device is thus increased.

To enable those skilled in the art to which my invention relates to fully understand the operation and merits thereof reference is made to the accompanying drawing in which like figures of reference indicate similar parts.

In the drawing: Figure 1 is a plan view of my sawing guide showing the relative arrangement of the parts to the saw. Fig. 2, is a section on line A—B, Fig. 1. Fig. 3 is a plan view of the carriage, as will be explained farther on.

As will be seen in Figs. 1, and 2, a slotted guide bar 1, is inlaid in the table top at an angle to the cut of the saw 7. A carriage 2, provided with an extension on its underside engaging the slot in said slotted guide bar 1, carries the sawing guide bar 3, on its end nearest the saw. A plan view of the carriage 2, is shown in Fig. 3, in order that its construction may be more plainly shown. An adjusting device 4, together with screws 5, and 6, may be provided for the parallel adjustment of the sawing guide bar 3, with

the saw 7, if desired. A lug 8, on the carriage 2, serves as a pivot for the eccentric and arm 9. The outer end of the eccentric arm 9, carries a screw or bolt 10, which operates in the slot 11, in the carriage 2, and is bound in any desired position in said slot by means of the lock nut 12. A disk 13, rotates around the periphery of the eccentric part of the eccentric and arm 9, and contains a series of holes 14, 14, around its periphery at graduated distances from the periphery of said eccentric. In a preferred construction there would be sixteen of these holes numbered zero to fifteen, with each hole one sixteenth of an inch nearer to the periphery of the eccentric than the preceding one of a lower number to the one numbered fifteen which would be fifteen-sixteenths of an inch nearer to the periphery of said eccentric than the one numbered zero. The eccentric and arm 9, and the disk 13, are held on the lug 8, by a nut 16, engaging the threaded portion of said lug. The slotted guide bar 1, is provided with a series of holes 15, 15, of the same size as the holes 14, 14, in the disk 13. In a preferred construction these holes would be one inch apart and located along one side of the slotted guide bar 1. A pin 17, engages any one of the holes in the disk 13, and any one of the holes in the slotted guide bar 1, according to the desired position of the sawing guide bar 3. A binding screw 18, serves to lock the carriage in the guide bar 1, after the desired position has been obtained.

Having thus described the construction of my device let us now consider its operation.

With the pin 17, set in the hole in the disk 13, farthest from the periphery of the eccentric and in the hole in the slotted guide bar 1, nearest the saw 7, the sawing guide bar 3, should just touch the saw. It is evident however that in changing and setting saws an adjustment is provided by means of the eccentric and arm 9, which is moved, backward or forward as the case may be, in the slot 11, of the carriage 2, until the sawing guide bar 3, just touches the saw 7. As the next hole in the slotted guide bar 1, is one inch from the one in which the pin 17, is setting, it is evident that if the carriage were moved until the pin 17, would set in this next hole that the sawing guide bar 3, would then be one inch from the saw. If the disk 13, were then turned one hole the sawing guide bar 3, would then be one and one-

sixteenth of an inch from the saw as each hole in the disk advances the carriage one-sixteenth of an inch. Thus by the different combinations of holes any desired distance
 5 between the saw and the sawing guide bar may be quickly and accurately obtained and the carriage then clamped firmly in position by means of the binding screw 18.

Having thus described my invention, what
 10 I claim and desire to secure by Letters Patent is the following:

1. In a device of the kind described the combination with a saw and sawing table of a slotted guide inlaid in the top of said
 15 sawing table at an angle to the saw, a carriage with a projection on its lower part, said projection fitting into and sliding freely in the slot in said slotted guide, a sawing guide bar carried by said carriage parallel
 20 with the saw, a binding screw on said carriage for locking it firmly in any desired position in said slot in the slotted guide, a lug on said carriage, an eccentric pivoted on said lug, an arm to said eccentric carrying a bolt at its outer end, a curved slot in
 25 said carriage for said bolt to slide in, a nut on said bolt for binding it in any desired position in said curved slot, a disk pivoted on the periphery of said eccentric, a series
 30 of holes in said disk at graduated distances from the periphery of said eccentric, a series of holes in said slotted guide so arranged that by moving said carriage and turning said disk any hole in said slotted guide may
 35 be made to coincide with any hole in said disk and a pin engaging a hole in said disk and a hole in said slotted guide, substantially as described.

2. In a device of the kind described the

combination with a saw and sawing table of 40
 a slotted guide in the table top at an angle to the saw, a carriage sliding freely in the slot in said slotted guide, a sawing guide bar carried by the said carriage parallel
 45 with the saw, a binding screw in said carriage for locking it in any position in said slotted guide, means for measuring whole inches on said slotted guide, means for
 measuring fractions of inches on a disk on said carriage, an eccentric carrying said 50
 disk on said carriage for changing the relative position of said carriage and said disk, for the purpose specified.

3. In a device of the kind described the combination with a saw and saw table of a 55
 sawing guide mounted on a carriage on said table parallel with the saw, means for clamping said carriage firmly on the table, means for sliding said carriage on said table
 60 at an angle to said saw, means for measuring the distance between the saw and sawing guide in whole inches on said table top, an eccentric carrying a disk mounted on said carriage, means for measuring fractions of
 inches on said disk, said disk so mounted 65
 on said eccentric that any constant error in the relative distance between the saw and the scale on the table may be corrected by shifting said eccentric, all substantially as
 70 described and for the purposes specified.

In testimony whereof I have affixed my signature in the presence of two subscribing witnesses.

VICTOR A. McWOLD.

Witnesses:

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