Aug. 29, 1933. W. R. KLATT 1,924,440

LOG TURNER

Filed Jan. 27, 1932 2 Sheets-Sheet 1

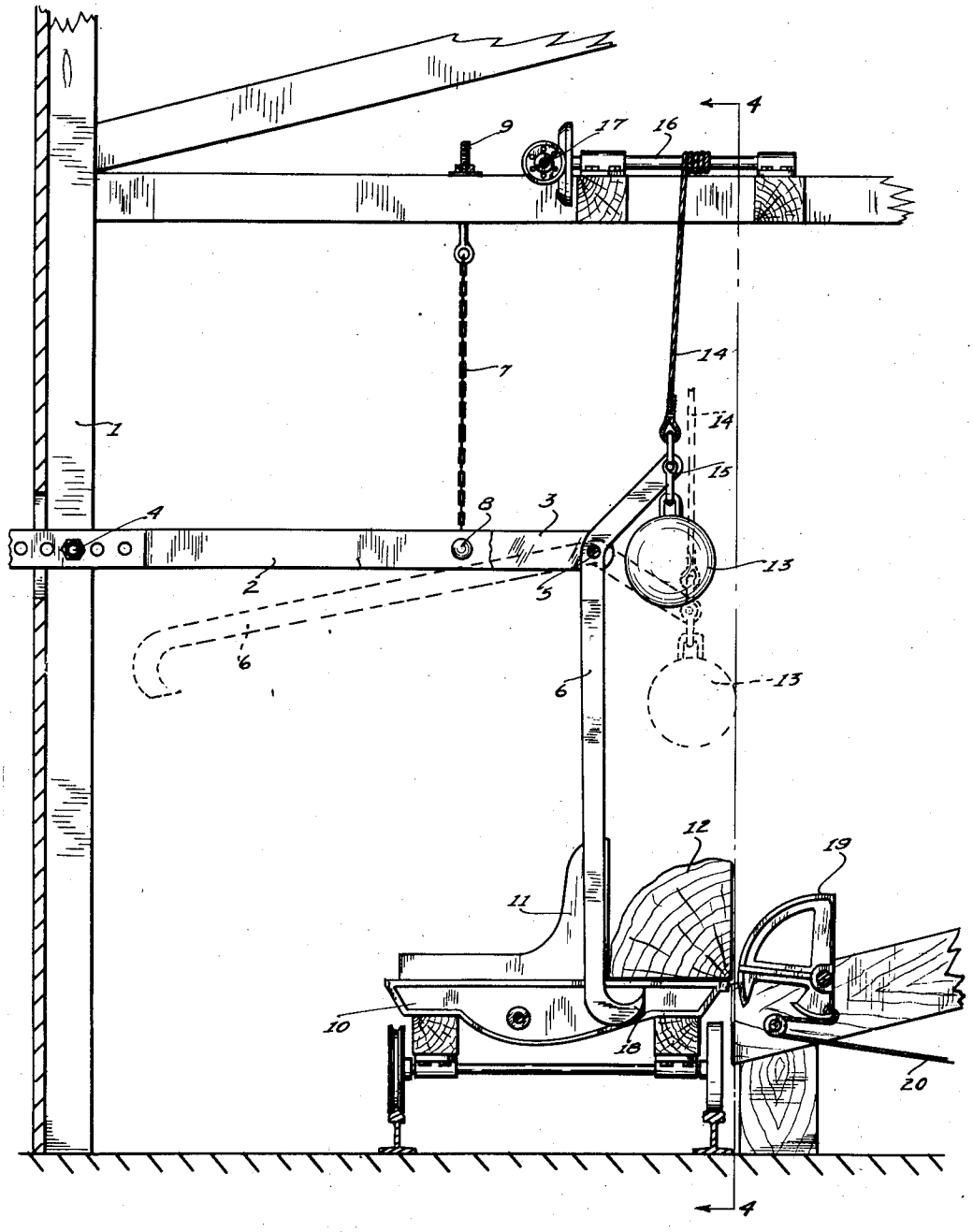


Fig 1

Inventor
Walter R. Klatt

By Thomas Bilyeu

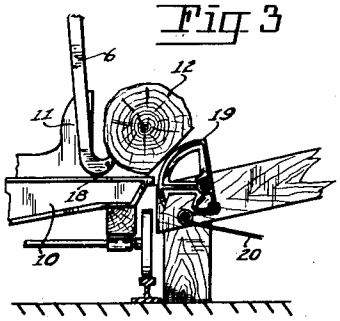
Attorney

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Fig. 3



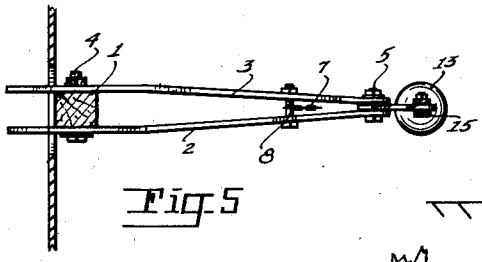


Fig. 5

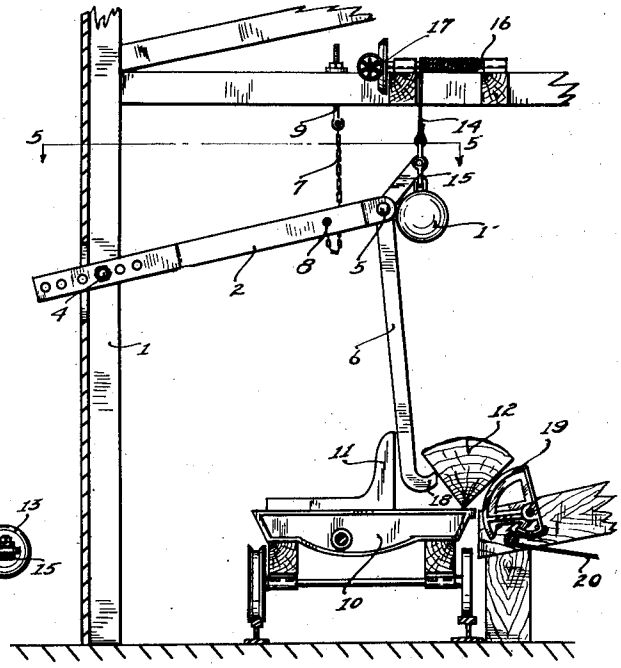


Fig. 2

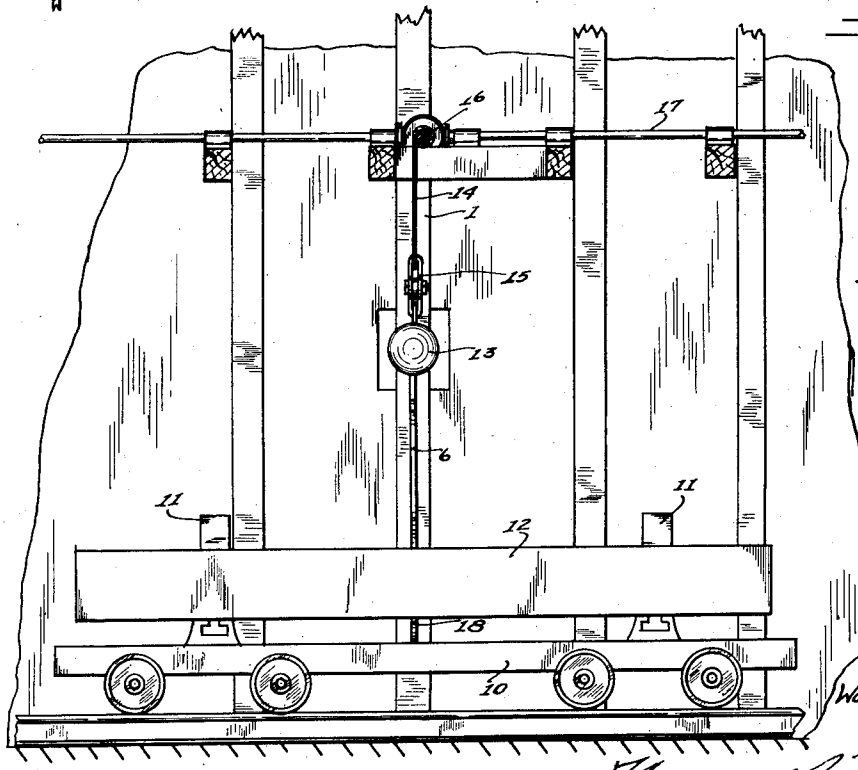


Fig. 4

Inventor
Walter R. Klatt

By Thomas Bilyeu

Attorney

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UNITED STATES PATENT OFFICE

1,924,440

LOG TURNER

Walter R. Klatt, Goldendale, Wash.

Application January 27, 1932. Serial No. 589,281

1 Claim. (Cl. 143—103)

My invention is adapted for use in saw mills and has for its purpose and object the turning of the log, or cant upon the carriage that is required to be turned during the sawing operation. Heretofore, in log turners in most general use, the log has been turned by a steam, air, or hydraulic nigger. These turners damaged the material being cut, due to the fact that the hook of the nigger engaged the material forcibly, and turned the material by pulling the same downward.

Through the use of my new and improved device I engage the material, to be turned, on the underside and lift up on the turning hook which has little tendency to damage the material.

In addition to the advantages of not damaging the material to be turned, my new and improved turner has the further advantage of simplicity of construction, and cheapness of first cost, and cheapness of operation.

My invention consists primarily of an arm 1 or other support, upon which a counter weighted hook is rockably disposed, the counter weighted hook having an offset near its point of support to which the turning line is attached. When the application of pulling pressure is applied to the line, the hook is automatically made to engage the material to be turned. The further application of the pulling pressure turns the material. A friction, or other power driven unit is preferably used in the creating of the pulling turning pressure. A hand manipulative means is provided for engaging and disengaging the power, the manipulation being accomplished by the sawyer.

A deck-block is disposed adjacent the carriage, upon which the material to be turned is made to engage, to thereby facilitate the turning operation.

One of the objects of my invention consists in providing a simply constructed log turning device that may be manipulated by the sawyer, or other attendant without material damage to the material to be cut, during the turning operation.

A further object of my invention consists in providing a simply constructed inexpensive device adapted for use in the small mills, that is susceptible of being used over a relatively long operating period with a minimum repair and operating expense.

A further object of my invention consists in providing a device that may be erected by those inexperienced in mill-wrighting and that is adapted for use where rotating shafts are provided. My device does not require the use of steam, or air to manipulate the same.

A still further object of my invention consists in providing a log turner that reduces the damage, to the material to be turned, to a minimum.

With these and incidental objects in view, the invention consists in certain novel features of construction and combination of parts, the essential elements of which are set forth in the appended claim, and a preferred form of embodiment of which is hereinafter shown with reference to the drawings which accompany and form a part of this specification.

In the drawings:

Fig. 1 is an end view of a log carriage, and a side view of one of my new and improved log turning devices shown in position for the turning of a partly sawed log, that is disposed upon the carriage.

Fig. 2 is an end view of the carriage, and a side view of the mechanism illustrated in Fig. 1, and illustrating the partially sawed log being turned by my new and improved log turner.

Fig. 3 is a fragmentary sectional end view of the log carriage, and a fragmentary sectional side view of the log turning device shown in position for the turning of a log that has been slabbed upon one side.

Fig. 4 is a sectional front view of the mechanism illustrated in Fig. 1, the same being taken on line 4—4, of Fig. 1, looking in the direction indicated.

Fig. 5 is a top plan view of the counter weighted arm and of the log turning hook associated therewith.

Like reference characters refer to like parts throughout the several views.

My invention is adapted for placement upon a post 1, or any other suitable supporting means. Arms 2 and 3 are disposed at the oppositely disposed sides of the post and are adapted for being rocked about a suitable journal bolt 4, that passes through the post and through the respective arms 2 and 3. The arms 2 and 3 are secured together upon their free end by a journal bolt 5. A counter weighted hook 6 is rockably disposed about the journal bolt 5. An adjustable supporting chain 7 is secured upon its one end, to a spreader bolt 8. The chain is secured upon its oppositely disposed end to an adjusting bolt 9. The purpose of the chain is to limit the downward travel of the

assembly and to position the arms 2 and 3 to limit the downward travel of the counter weighted hook 6.

The log carriage is shown at 10, and the deck-block is shown at 11. The material 12, to be turned, is carried upon the bolster of the carriage and is normally in engagement with the deck-block 11. The counter weighted hook is rockably disposed about the bolt 5 and the counter weight 13 normally maintains the hook out of registry with the material to be turned. A line 14 is secured upon its one end to the upper end 15 of the counter weighted hook and its oppositely disposed end is trained about a shaft 16. The shaft 16 is adapted for being driven by the drive shaft 17, through the use of suitable coacting elements, and is adapted for being periodically driven by a mechanism not here shown.

When pulling pressure is applied to the line 14 the effect of the counter weight in maintaining the hook out of registry with the material to be turned forces the primary staff of the hook into registry with the material to be turned. In the initial stages the hook is disposed below the engaging surface of the material to be turned. The further application of pulling pressure to the line causes the hook 18 to engage the material to be turned; as the material is turned, the log engages the deck-block 19 and causes the material to be turned and moved laterally against the deck-block. The deck-block 19 is again righted to its normal upright position through the application of pulling pressure to the line 20. The release of pulling pressure to the line 14 permits the arms 2 and 3 to return to their normal position of repose and for being supported upon the line 7 and to return the hook out of registry with the material to be turned.

While the form of mechanism herein shown and described is admirably adapted to fulfill the objects primarily stated, it is to be understood that it is not intended to confine the invention to the one form of embodiment herein shown and described, as it is susceptible of embodiment in various forms, all coming within the scope of the claim which follows.

What I claim is:

In apparatus of the class described, the combination of a log carriage having stationary and movable deck-blocks associated therewith to receive a log therebetween, a supporting frame disposed at one side of said carriage, an arm pivotally and adjustably mounted to said frame and extending outwardly therefrom to a point directly above said log carriage, a hook swingably mounted to the outer end of said arm and having a forwardly offset extension beyond the pivot and adapted for engagement when the shank thereof is in vertical position with the underside of a log mounted on said carriage, a limit stop means interconnecting said supporting frame with said arm, and power transmission means carried by said frame connecting with the offset portion of the shank of said hook which offset portion is also provided with a counterweight.

WALTER R. KLATT.