

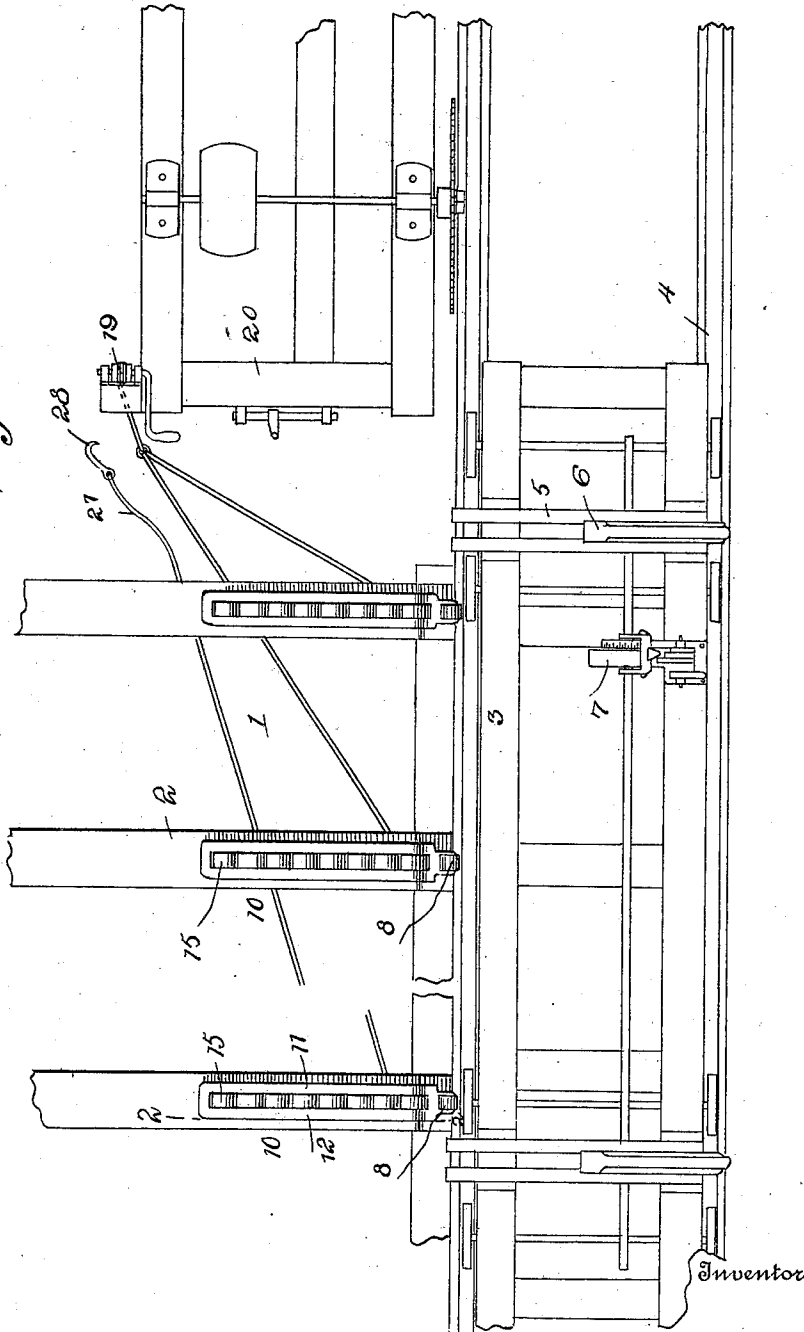
W. H. PORTER.
 LOGGING DEVICE.
 APPLICATION FILED APR. 26, 1910.

989,413.

Patented Apr. 11, 1911.

3 SHEETS-SHEET 1.

Fig. 1



Witnesses
 William Smith.
 Edwardson

By William H. Porter.
 Victor J. Evans
 Attorney

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3 SHEETS—SHEET 2.

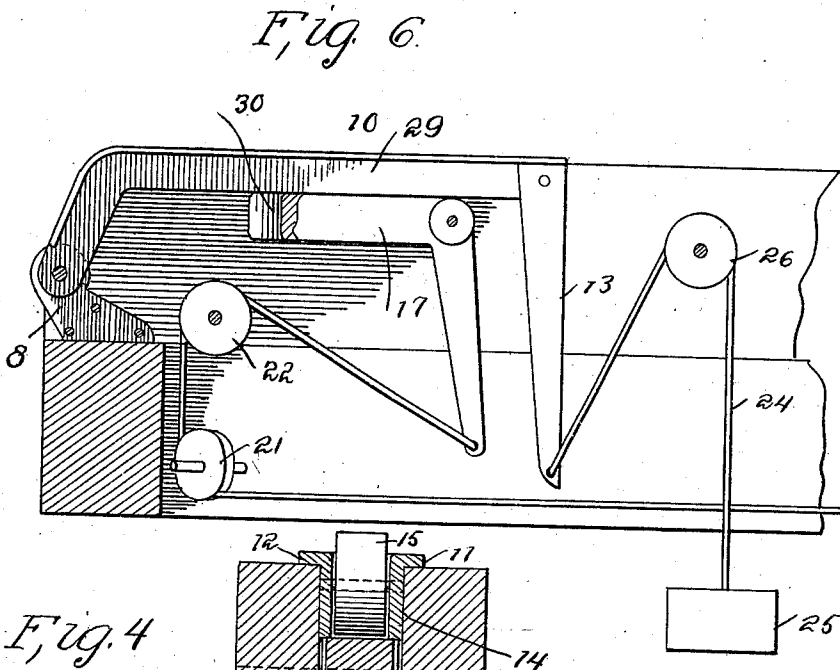
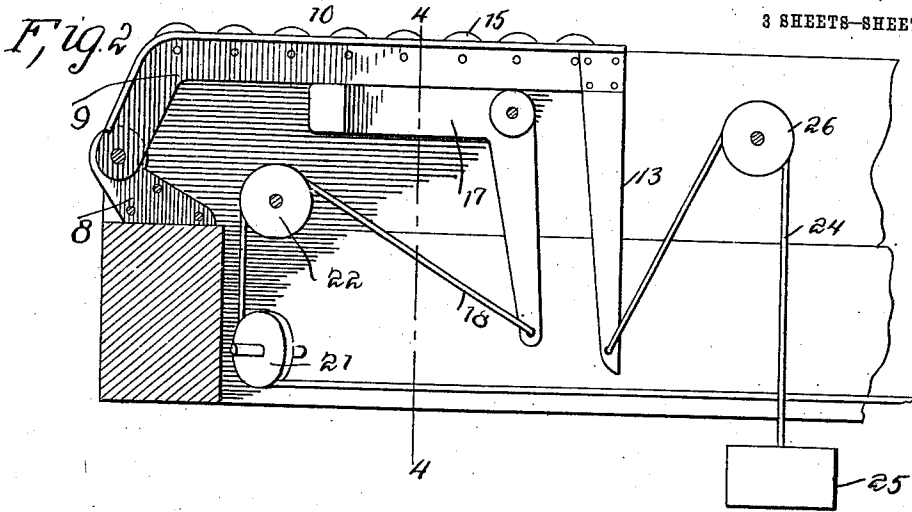
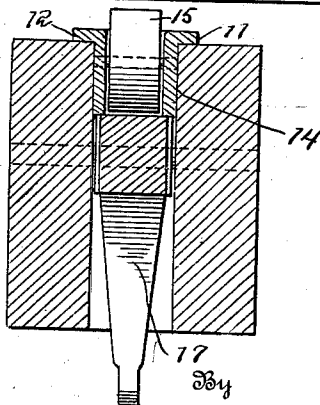


Fig. 4



Witnesses

William Smith
Edmund J. ...

Inventor

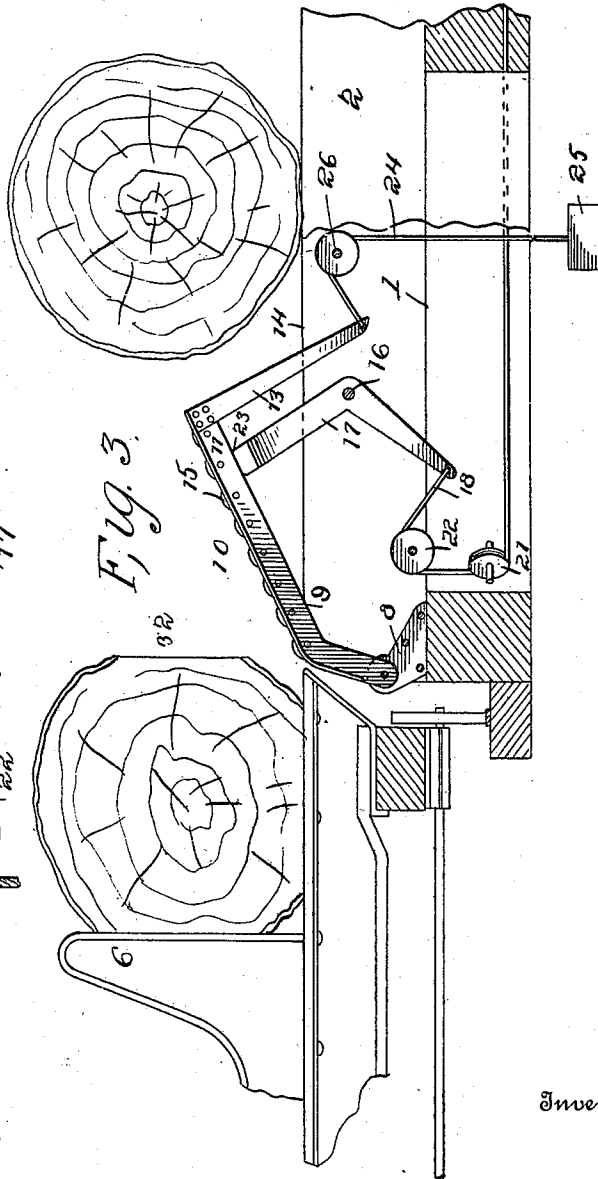
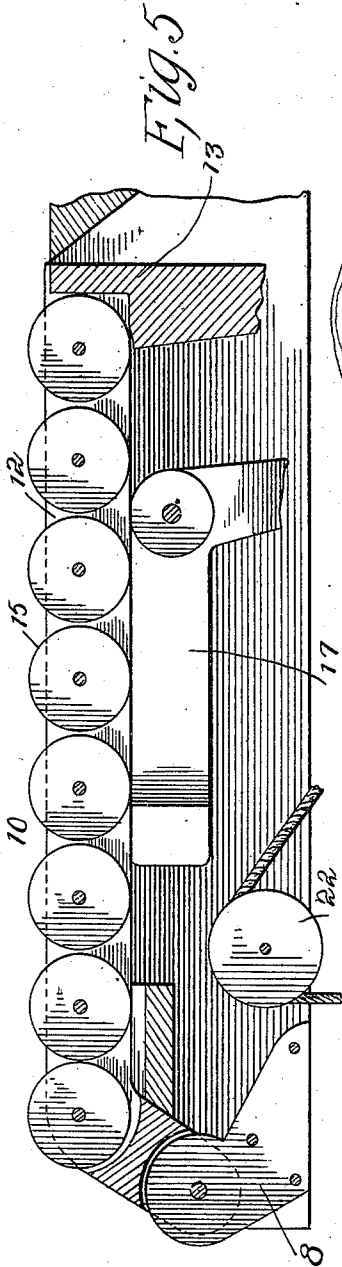
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3 SHEETS-SHEET 3.



Witnesses

William Smith
Edw. J. Smith

By

William H. Porter
Victor J. Evans
Attorney

Inventor

UNITED STATES PATENT OFFICE.

WILLIAM H. PORTER, OF PHOENIX, ARIZONA TERRITORY.

LOGGING DEVICE.

989,413.

Specification of Letters Patent.

Patented Apr. 11, 1911.

Application filed April 26, 1910. Serial No. 557,790.

To all whom it may concern:

Be it known that I, WILLIAM H. PORTER, a citizen of the United States, residing at Phoenix, in the county of Maricopa and Territory of Arizona, have invented new and useful Improvements in Logging Devices, of which the following is a specification.

This invention relates to logging niggers and the object thereof is the provision of a device which may be readily operated by the sawyer and which will take the place of the present expensive steam niggers now in use.

A further object of the invention is the provision of a novel logging nigger which is provided with means whereby the device may be adapted for a skid stop.

Further objects of the invention will appear as the specific description which follows is read in connection with the accompanying drawings in which:

Figure 1 is a top plan view. Fig. 2 is a transverse section on the line 2—2 of Fig. 1. Fig. 3 is a similar view showing the parts in operative position. Fig. 4 is a detail longitudinal sectional view on the line 4—4 of Fig. 1. Fig. 5 is a detail longitudinal section through the center of the nigger. Fig. 6 is a view similar to Fig. 2 of a modification.

Referring more especially to the drawings, 1 represents the logging deck from which are raised the usual logging skids 2 which terminate adjacent to the side of the saw carriage 3. This carriage travels on the rails 4 in the usual manner and is provided with the ordinary head blocks 5 and knees 6 together with mechanism indicated at 7 for operating the knees and their locking dogs. The mechanism is only conventionally shown as it forms no part of this invention and the saw carriage is only shown to indicate its relative position with the nigger. Secured to the end of a certain number of the skids are pivotal blocks 8 upon which is pivoted the frame-work 9 of the nigger 10. This frame-work consists of separate angle irons 11 and 12 connected together at their free end by a right angular arm 13 which extends down through the mortise 14 in which the nigger lies when in inactive position. The frames or angle irons 11 and 12 have journaled between them a series of anti-friction rollers 15 over which the log travels to the head blocks of the carriage 3.

Journaled on a transverse shaft 16 extend-

ing across the mortise 14 is a bell crank lever 17 to one leg of which is connected an operating cable 18. This cable extends from the bell crank lever 17 to a winding drum 19 carried preferably upon the saw frame 20 and passes over pulleys 21 and 22, the former of which is carried by the deck in any suitable manner and the latter of which is journaled upon a shaft extending across the mortise 14. The opposite end of this lever is adapted to abut the under side of the nigger and is cammed off as at 23 so as to secure a relatively easy engagement thereof when the lever is operated to raise the nigger.

Secured to the lower end of the arm 13 is a cable 24 which has secured to its lower end a counter weight 25 balancing the weight of the nigger. The cable 24 runs over a pulley 26 journaled on a shaft passing across the mortise 14. It will thus be seen that the lever 17, arm 13 and all the operating parts are substantially concealed within the mortise, and the overhanging flanges of the angle irons 11 prevent sawdust and dirt from getting into the mortise and thus retarding the action of the lever.

When the nigger is arranged as a log stop it is thrown to the position shown in Fig. 3 and when it is desired to skid a log onto the carriage, the rollers upon the nigger act as anti-friction means and permit the log being readily rolled in place. If it is desired to turn a log after being cut, as shown at 32, the nigger is placed in active position and the log turned over upon it by any suitable mechanism such, for instance, as the cable 27 and the hook 28. This cable leads to suitable winding mechanism which is an unimportant feature and is therefore not illustrated. When the log is thrown upon the nigger from the carriage, it has a slight rebound and is automatically slid back into place. The log is thus automatically skidded into position on the head block and knee dogs are then operated to hold it in proper position for a new cut.

In the modification shown in Fig. 6, the nigger 10 is constructed to a single T-iron 29 and the bell crank lever 17 has its upper end slotted as at 30 so as to straddle the web of the iron. Otherwise the construction and operation are exactly similar to that shown in Figs. 2 and 3.

Having thus described the invention, what is claimed is—

In a device of the class described, the

combination with mortised skids and a saw frame, of niggers pivoted in said skids and having means for limiting the downward movement, said means adapted to prevent
5 ingress of sawdust or other foreign material to the mortises, bell crank levers journaled in the mortises, an arm carried by each nigger and working in said mortises and adapted to form a log stop when the nigger
10 is raised, a counter weight connected to the end of said arm for balancing the weight of the nigger, a cable connected to each bell crank at one end and having a hook at its opposite end, a drum on the saw frame, and a rope wound around said drum and having
15 a ring in its free end to removably engage said hooks, whereby all of the niggers may be operated simultaneously or separately.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. PORTER.

Witnesses:

H. FRED. SNIDER,
N. J. HANLEN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
