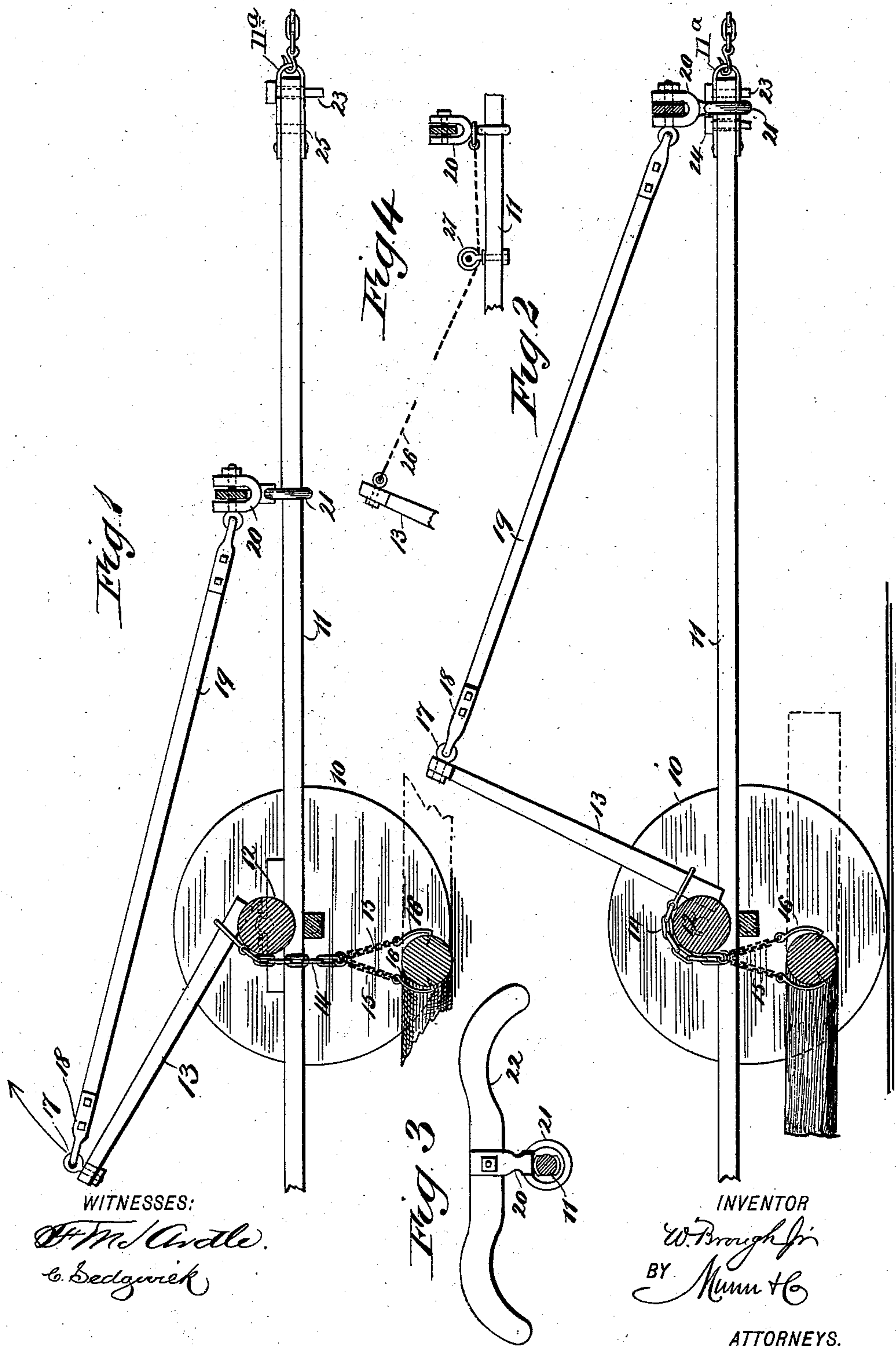


(No Model.)

W. BROUGH, Jr.  
LOGGING TRUCK.

No. 531,503.

Patented Dec. 25, 1894.



WITNESSES:

*W. M. Ardle*  
*C. Sedgwick*

INVENTOR

*W. Brough Jr*  
BY *Munn & Co*

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

WILLIAM BROUGH, JR., OF WARREN, TEXAS.

## LOGGING-TRUCK.

SPECIFICATION forming part of Letters Patent No. 531,503, dated December 25, 1894.

Application filed December 9, 1893. Serial No. 493,232. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM BROUGH, Jr., of Warren, in the county of Tyler and State of Texas, have invented a new and Improved Log-Loader, of which the following is a full, clear, and exact description.

My invention relates to improvements in that class of devices which are used in logging, to load logs on high wheeled trucks.

In countries where there is not much snow it is the practice to haul logs by suspending them from rollers on high wheeled trucks; and the object of my invention is to produce a very simple and convenient apparatus which is operated by a team to raise the logs from the ground, and which thus obviates the necessity of using a hand windlass as is usually done.

To these ends my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

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

Figure 1 is a broken sectional elevation of a truck provided with my improved loading device, showing the position of the device before the log is lifted. Fig. 2 is a similar view showing the position of the device after the log is lifted. Fig. 3 is a cross section of the tongue, and shows the manner in which the ring of the loading device is connected with the yoke of the team used on the truck; and Fig. 4 is a broken detail view of a modified arrangement of the device.

The truck is provided with the usual high wheels 10, having the customary tongue 11 and cross roller or support 12, which is actuated by a sweep 13 and carries a chain 14, which, at its lower end, is provided with a grapple consisting of the branch chains 15 and the grapple hooks 16 secured to the chains and adapted to engage a log. The tongue is provided with a hitch 11<sup>a</sup>. The above construction is of substantially the usual kind, and forms in detail no part of my invention, that is, the several parts may be of the usual construction, but I desire it to be understood that in their relative arrangement to and in their combination with other parts presently

to be described the hoisting device and the tongue provided with the hitch form a part of the invention.

The sweep 13 has at its free end an eye bolt 17, which engages a clevis 18 on one end of a connecting rod 19, although connection between the rod and the sweep may be made in any other convenient and suitable manner. The front end of the connecting rod 19 is pivoted to a clip 20, which is adapted to connect with the yoke 22 of a team hitched to the cart, and the clip carries a ring 21 which slides on the tongue 11. The forward movement of the ring 21 on the tongue is limited by a pin 23, and when the ring has been drawn forward to the pin, it is prevented from moving back by inserting a pin 24 in the hole 25 in the tongue behind the ring, as shown in Fig. 2.

When the loader is to be used, the sweep 13 is turned back in the position shown in Fig. 1, so as to load the truck, and this movement may be effected by backing the team whose yoke is connected with the sweep as described. The grapple is then made fast to the log to be raised and the team is started, and in starting the team pulls forward the rod 19 and sweep 13, thus turning the roller 12, winding up the chain 14 and lifting the log. When the team has drawn the ring 21 forward to the end of the tongue, the team will be in its customary position to handle the truck, and the pin 24 is inserted behind the ring, and this arrangement prevents the log from dropping and the roller from turning when the team is backed. Instead of the connecting rod 19, a chain may be used, but the connecting rod is preferably employed as this arrangement enables the backing of the team to lower the grapple. It will therefore be understood that when a chain is employed in lieu of the rod, the advantage just mentioned is sacrificed. The main advantage of the invention, however, as particularly pointed out in the last paragraph of this description is preserved whether a chain or a rod or any other connection be employed.

Instead of using the rod 19, as specified, a chain 26, see Fig. 4, may be fastened to the free end of the sweep 13 and passed beneath a guide pulley 27 on the tongue 11 and connected with the slide ring, so that when the



team is started the sweep will be actuated as above specified.

It will be understood that one couple of animals is hitched to the yoke 22, while the rest, if more than two animals are employed, are hitched to the tongue. Owing to this arrangement only the rearmost pair of animals need be backed when it is desired to lower the grapple, as the hitch 11<sup>a</sup> remains stationary during this operation.

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

1. A cart provided with a hoisting device, a relatively stationary hitch, another hitch having relative movement to the said stationary hitch longitudinally of the cart, and an operative connection between the hoisting device and the movable hitch, substantially as described.

2. The combination, with the cart provided with a rigid tongue having a hitch secured thereto, and a hoisting device on the cart, of a slide having guided movement longitudinally of the tongue, a hitching device secured to the slide in the rear of the hitch that is secured to the tongue, and an operative connection between the slide and the hoisting device, substantially as described.

3. The combination, with the cart and tongue, of a hoisting device carried by the cart, said hoisting device being provided with a sweep, the slide on the tongue, and a connecting rod extending from the sweep to the slide, substantially as described.

WILLIAM BROUGH, JR.

Witnesses:

TOM J. RUSSELL,  
L. F. DANIELL.