

R. L. LAMBERTON.
HOISTING DEVICE.
APPLICATION FILED MAY 21, 1910.

975,876.

Patented Nov. 15, 1910.

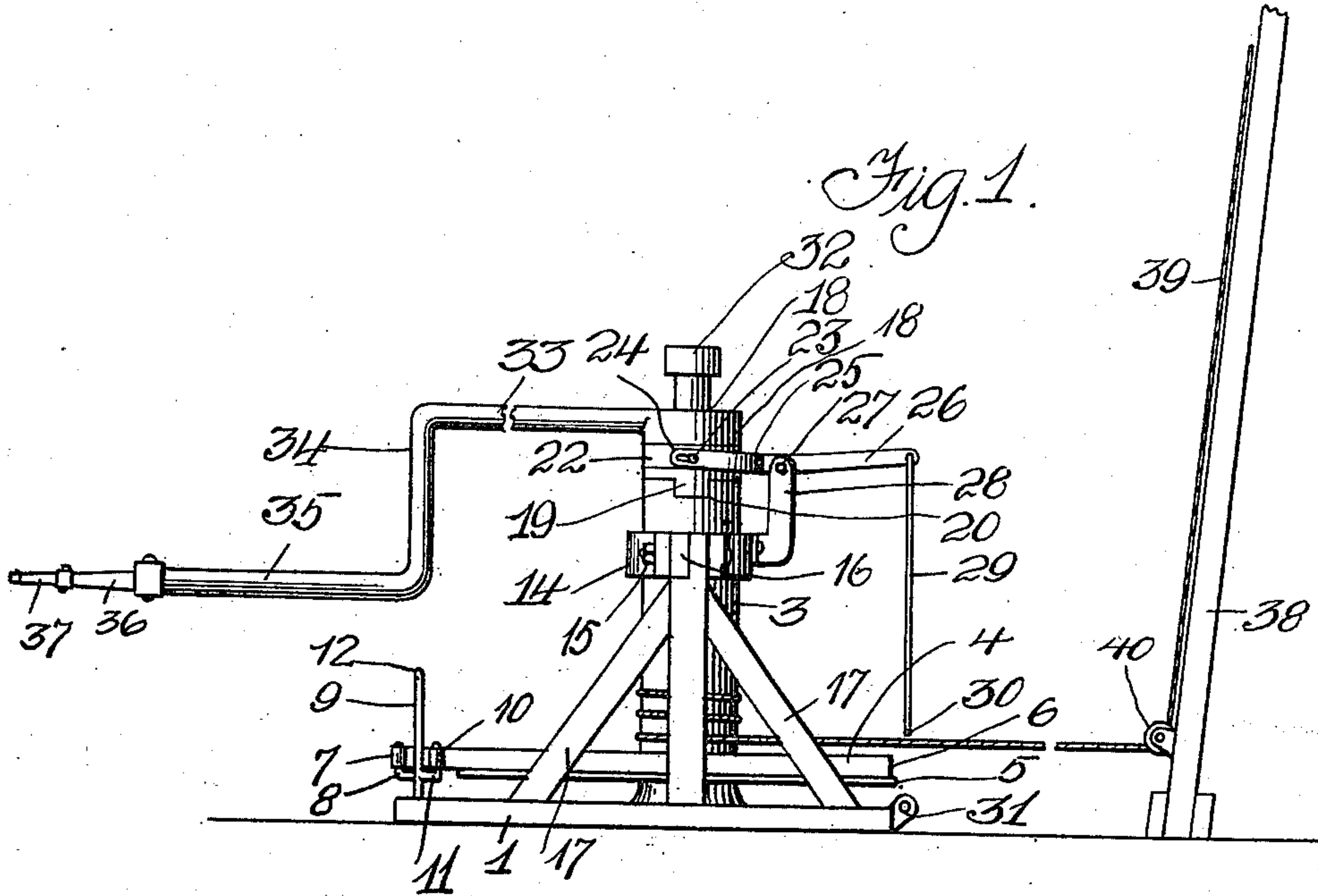


Fig. 2.

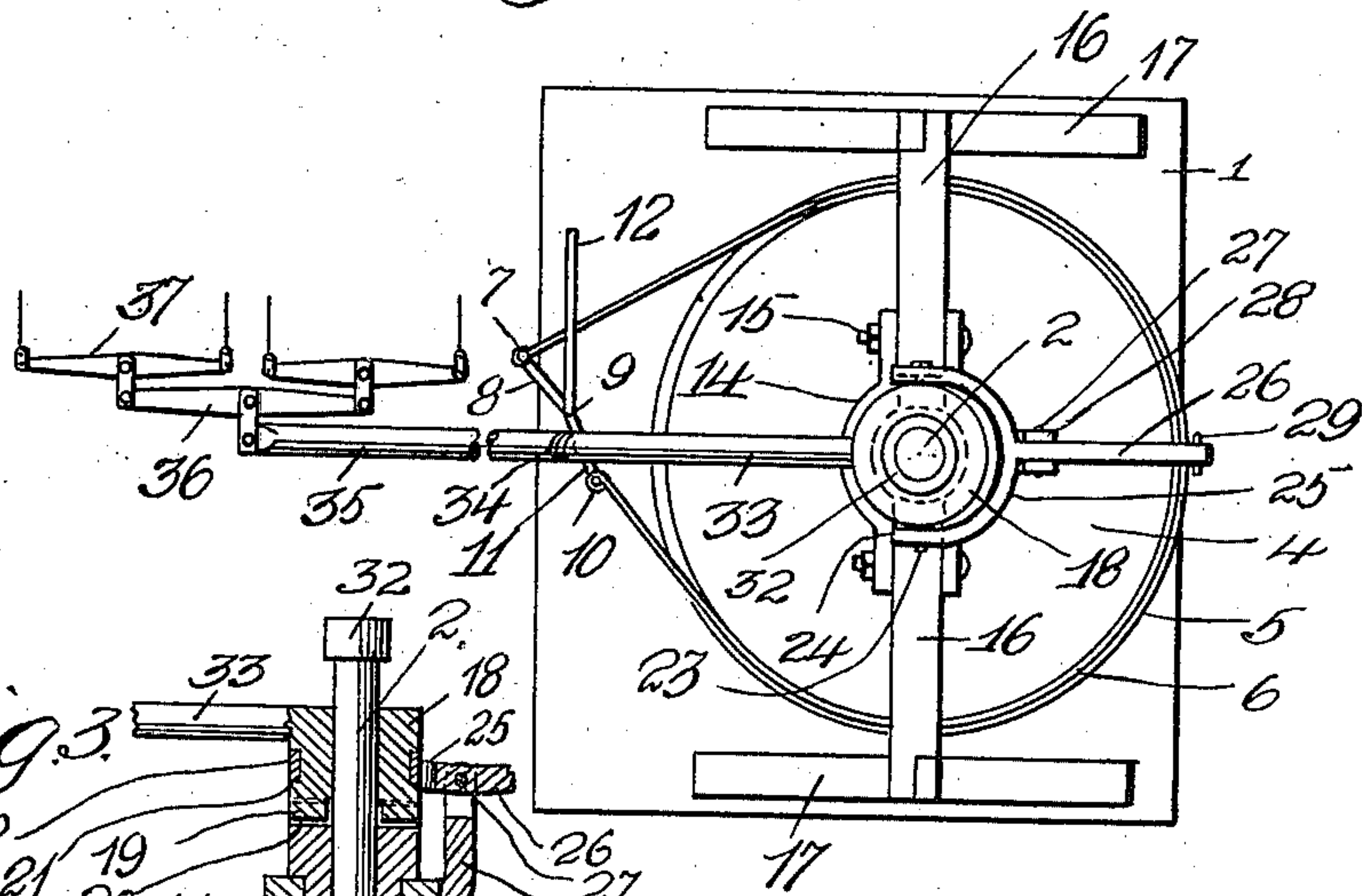
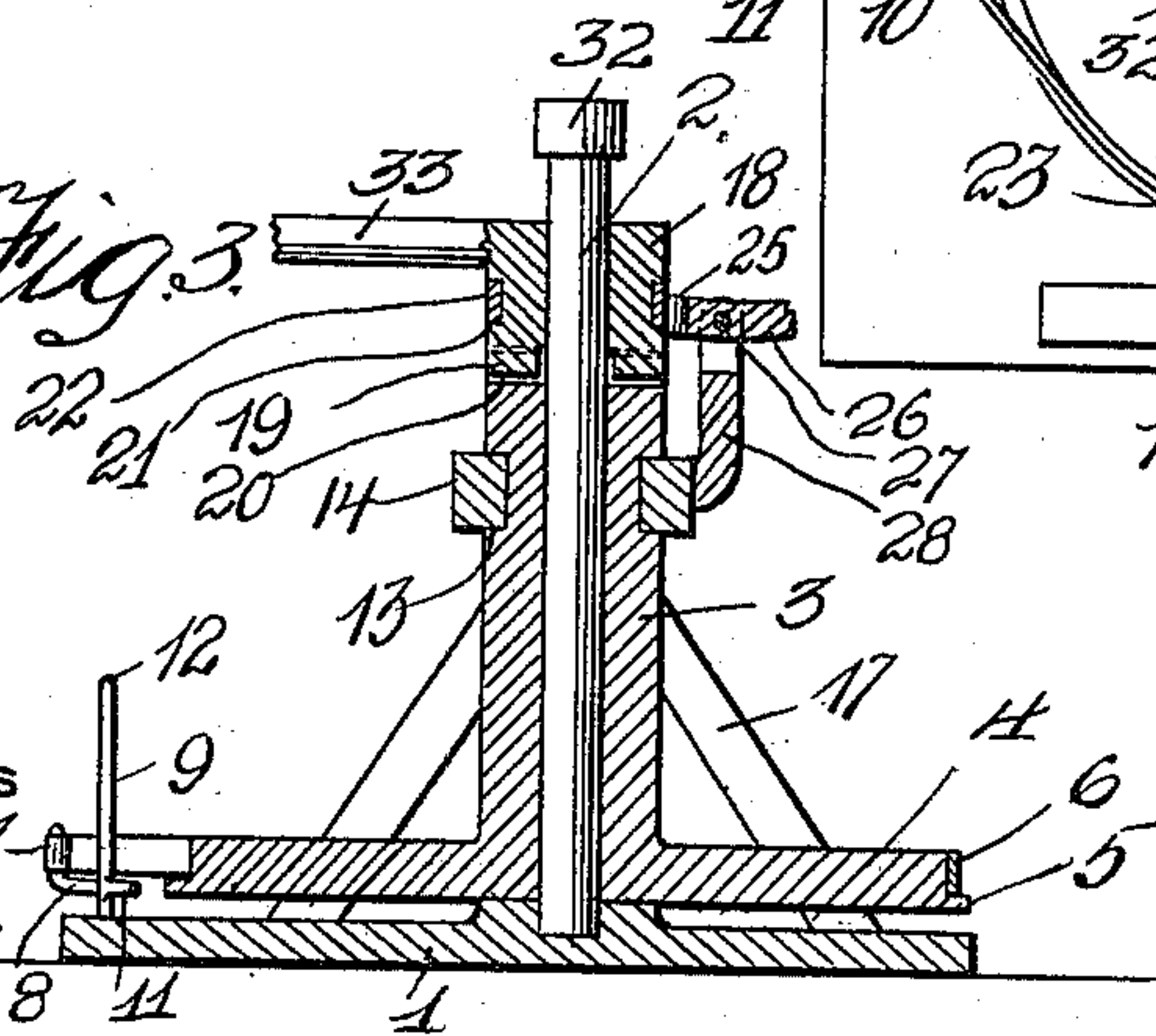


Fig. 3.



WITNESSES

Sam'l Payne
Wm. Butler

INVENTOR
R. L. LAMBERTON,

by

A. C. Everett
Attorneys.

UNITED STATES PATENT OFFICE.

ROBERT LESLIE LAMBERTON, OF SISTERSVILLE, WEST VIRGINIA.

HOISTING DEVICE.

975,876.

Specification of Letters Patent.

Patented Nov. 15, 1910.

Application filed May 21, 1910. Serial No. 562,754.

To all whom it may concern:

Be it known that I, ROBERT LESLIE LAMBERTON, a citizen of the United States of America, residing at Sistersville, in the county of Tyler and State of West Virginia, have invented certain new and useful Improvements in Hoisting Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to hoisting devices particularly designed for use in the oil fields, where it is necessary to use portable hoisting or lifting devices for removing casings, tubing, valves, pump rods, and other matter from oil wells.

The object of my invention is to provide a novel hoisting device adapted to be operated by horse power and in connection with the device there is a clutch for controlling the operation of the device, also a brake band that controls the operation of the device with either the clutch in or out of engagement with the driving hub of the device.

I attain the above and such other objects as may hereinafter appear by a mechanical construction that will be hereinafter specifically described and then claimed, and reference will now be had to the drawing forming a part of this specification, wherein:

Figure 1 is a side elevation of the hoisting device. Fig. 2 is a plan of the same, and Fig. 3 is a vertical sectional view of a portion of the device.

In the accompanying drawings the reference numeral 1 denotes a base plate, rectangular in plan and provided with a vertical post 2 approximately central of the base plate.

3 denotes a vertical sleeve revolubly mounted upon the post 2, said sleeve having the lower end thereof provided with a horizontal brake wheel 4, the lower edge of said brake wheel having a peripheral flange 5 supporting a brake band 6 in engagement with the wheel 4. The brake band 6 has one end thereof pivotally connected, as at 7, to the crank 8 of a vertical shaft 9, while the opposite end of said brake band is pivotally connected, as at 10 to another crank 11, carried by the shaft 9 opposite the crank 8. The upper end of the shaft 9 is provided with an operating handle or crank 12 and the lower end of said shaft is suitably journaled in the base plate 1.

13 denotes an annular groove formed in

the sleeve 3 adjacent to the upper end thereof and loosely mounted in said groove are two semi-cylindrical straps 14 having the ends thereof connected, as at 15, to transverse braces 16 supported by the upper ends of diametrically opposed A-frames 17 mounted upon the base plate 1. These A-frames, the braces 16, and the straps 14 steady the sleeve 3 as it revolves upon the post 2.

18 denotes a hub revolubly mounted upon the upper end of the post 2, said hub having the lower end thereof provided with diametrically opposed teeth 19 adapted to engage in diametrically disposed grooves 20 formed in the upper end of the sleeve 3, said hub constituting a clutch member for engaging the sleeve 3 and causing said sleeve to rotate with said hub. The hub 18 intermediate the ends thereof is provided with an annular groove 21 and loosely mounted in said groove is a ring or band 22 provided with diametrically disposed pins 23. Loosely mounted upon these pins are the slotted ends 24 of a yoke 25 having an outwardly extending arm 26. The arm 26 is fulcrumed by a pin 27 in a bracket 28, carried by one of the straps 14. The outer end of the arm 26 is provided with a depending rod 29 having a hook-shaped end 30 adapted to engage in an apertured lug 31 carried by the front edge of the base plate 1. The yoke 25, arm 26, and rod 29 in conjunction with the lug 31 are employed for holding the hub 18 in a raised position out of engagement with the upper end of the sleeve 3, the upward movement of the hub 18 being limited by a head 32, carried by the upper end of the post 2.

33 denotes a radially disposed arm carried by the upper end of the hub 18, said arm being bent downwardly, as at 34, and then outwardly, as at 35, and the extreme end of the arm provided with a pivoted double tree 36 and swingle trees 37, whereby a team of horses can be attached to the outer end of the arm.

The hoisting device is located adjacent to a derrick or suitable rigging 38 which is in proximity to a wheel, whereby a hoisting cable 39 can be used directly above the wheel, the cable after passing upwardly over the derrick or rigging 38 passes downwardly under a revoluble sheave 40 and is wound upon the sleeve 3, the cable upon the sleeve 3 being manipulated similar to a cable upon a capstan.

With the hub 18 in engagement with the

sleeve 3, the hoisting cable 39 can be easily wound upon said sleeve, and by throwing the hub 18 out of engagement with the upper end of the sleeve 3, the brake band 6
5 can be used for controlling the unwinding of the cable 39 and consequently the lowering of matter into a well.

It is thought that the operation and utility of the hoisting device will be apparent
10 without further description, and while in the drawings there is illustrated a preferred embodiment of the invention, it is to be understood that the structural elements thereof can be varied or changed, as to the size,
15 shape, and manner of assemblage without departing from the spirit and scope of the invention.

What I claim, is:

1. A hoisting device comprising a base
20 plate, a post carried thereby, a sleeve revolvably mounted upon said post, a brake wheel carried by the lower end of said sleeve, a brake band adapted to control the movement of the brake wheel, means carried by
25 the base for operating the brake band, a revoluble clutch member mounted upon the upper end of the post and adapted to engage in the upper end of the sleeve whereby the latter is revolved with the member,
30 means for revolving the clutch member, a split band loosely engaging in said sleeve, means carried by the post and connected to said band for bracing the sleeve and the post,

a bracket projecting from said band, a shift-
able member pivotally connected to said 35
bracket and engaging with said clutch member and adapted when elevated to move the clutch member clear of the sleeve, and connections between said shiftable member and
base for maintaining the clutch member in 40
an elevated position.

2. A hoisting device comprising a base
plate, a post carried thereby, a sleeve revolvably mounted upon said post, a revoluble
clutch member mounted upon the upper end 45
of the post and adapted to engage in the upper end of the sleeve whereby the latter is revolved with the member, means for revolving the clutch member, a split band
loosely engaging in said sleeve, means car- 50
ried by the post and connected to said band for bracing the sleeve and the post, a bracket projecting from said band, a shiftable member pivotally connected to said bracket and
engaging with said clutch member and 55
adapted when elevated to move the clutch member clear of the sleeve, and connections between said shiftable member and base for maintaining the clutch member in an elevated position. 60

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

ROBERT LESLIE LAMBERTON.

Witnesses:

P. P. MILLIKEN,
ALICE MILLIKEN.