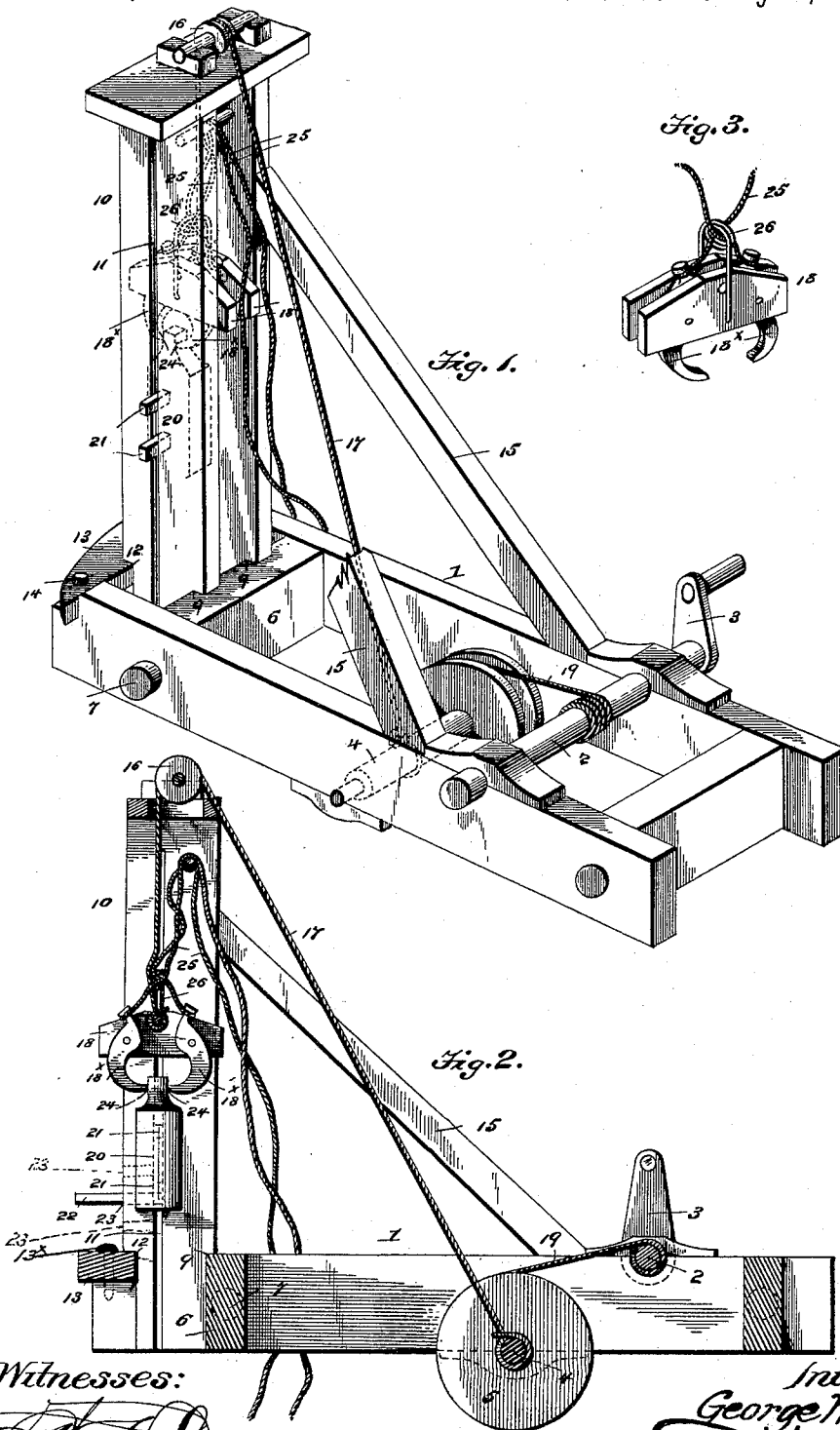


(No Model.)

G. W. WILSON.
POST OR PILE DRIVER.

No. 431,306.

Patented July 1, 1890.



Witnesses:

J. M. Heatow
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Inventor:

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UNITED STATES PATENT OFFICE.

GEORGE W. WILSON, OF ARCADIA, LOUISIANA.

POST OR PILE DRIVER.

SPECIFICATION forming part of Letters Patent No. 431,306, dated July 1, 1890.

Application filed February 5, 1890. Serial No. 339,247. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WILSON, a citizen of the United States of America, residing at Arcadia, in the parish of Bienville and State of Louisiana, have invented certain new and useful Improvements in Post or Pile Drivers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in post or pile drivers; and the object of the invention is the provision of a machine of this character which will be thoroughly efficient for the intended purpose, and which shall possess merit in point of simplicity and durability, and which can be produced at a low figure.

To attain the desired objects, the invention consists of a post or pile driver embodying novel features of construction and combinations of parts, substantially as herein illustrated, described, and specifically defined by the claims.

Figure 1 represents a perspective view of a post or pile driver constructed in accordance with and embodying my invention. Fig. 2 represents a vertical longitudinal section thereof, and Fig 3 represents a detail view of the gripper.

Referring by numerals to the drawings, in which similar numerals denote corresponding parts in the several figures—

The numeral 1 designates the frame of my machine, which is of rectangular shape, in order that it may be readily and securely supported on a running-gear.

Mounted in the frame is a shaft 2, having thereon a crank 3 for the ready and easy rotation of the shaft, and a shaft 4, having thereon a drum 5, which is preferably grooved, as shown. In the frame, at one end thereof, is also journaled a beam 6, which, in order to permit its journaling, is provided with reduced ends or journals 7, bearing in openings in the frame. The front side of the beam or bar 6 is provided with notches or recesses 9, in which fit the ends of the vertical posts or uprights forming the derrick 10, the posts of which are provided with the channels or slots 11, and at their lower ends, as at 12, notched or recessed. By this construction it will be seen that the derrick may be raised to a ver-

tical position and lowered, as may be found necessary, and in order to secure the derrick in a vertical position I provide the arm or latch 13, which is pivoted at one end to one of the side rails of the frame, as shown at 13^x in Fig. 2, and at the other end carries a retaining pin or bolt 14, which engages the other side rail, thus confining the derrick in a vertical position, and in addition thereto I employ the braces 15.

In the upper end of the derrick is mounted a guide-pulley 16, over which passes the rope or chain 17, one end of which is connected to the gripper 18 and the other end to the shaft 4, and which may be termed the "hoisting-rope," and a rope 19 is wound on the shaft 2 and drum 5 for operating the hoisting-rope.

In the uprights or posts forming the derrick are slots or channels, in which the arms or guides 21 on the driver 20 travel, and said guides 21 are adapted to contact with a pin or bar 22, fitting in one of the series of openings 23, thus limiting the downward movement of the driver in the derrick. I provide a series of the openings 23 to receive the bar 22, in order that the driver may fall different distances, or, in other words, be accommodated as it drives the post or pile.

The upper end of the driver is provided with notches, slots, or recesses 24, in which engage the hooks 18^x of the gripper, and allow the gripper to firmly engage the driver and permit it to carry the driver upward by the movement of the hoisting-rope; and in order to disengage the gripper-hooks from the driver at the proper moment I provide the releasing-cord 25, the ends of which are passed through the guide-wire 26 and connected to the upper ends of the gripper-hooks, and by pulling upon which the hooks are disengaged from the driver.

The manner of using my improved machine will be readily understood, as it is merely necessary to elevate the derrick and fasten it in such position, engage the hooks with the driver, then elevate the driver by turning the crank-shaft, and when the driver has reached the proper elevation draw upon the releasing-cord, effecting the disengagement of the gripper-hooks with the driver, and permitting the same to descend with force upon the post or pile and driving it the desired distance.

It is evident that I provide a simple, cheap, and durable machine, which can be readily transported from place to place, and which is easy to operate and thoroughly efficient, thus commending itself as a practical and useful machine.

I claim as my invention—

1. A post or pile driver consisting of a frame, a derrick pivoted therein having its lower ends notched, a fastening-bar on the frame engaging the notches to retain the derrick, a driver traveling in the derrick and having an arm, an adjustable bar which the arm engages, a gripper having a guiding-wire, a releasing-cord for operating the gripper, and means for raising the driver.

2. A post or pile driver consisting of a frame, a derrick mounted therein, a driver traveling in the derrick, a stop for limiting the movement of the driver, a gripper having hooks for

engaging the driver, means for hoisting the driver, and a cord connected to the gripper-hooks for releasing them from engagement with the driver.

3. In a post or pile driver, the combination of the frame, the derrick mounted therein, and the fastening-arm having one end pivoted to one rail of the frame and the other end adapted to be removably secured to the other rail of the frame for retaining the derrick.

4. In a post or pile driver, the combination of the derrick, the driver, the adjustable stop, the gripper, and the releasing-cord therefor.

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

GEORGE W. WILSON.

Witnesses:

L. F. K. KENNOLD,
I. R. HIGHTAUER.