

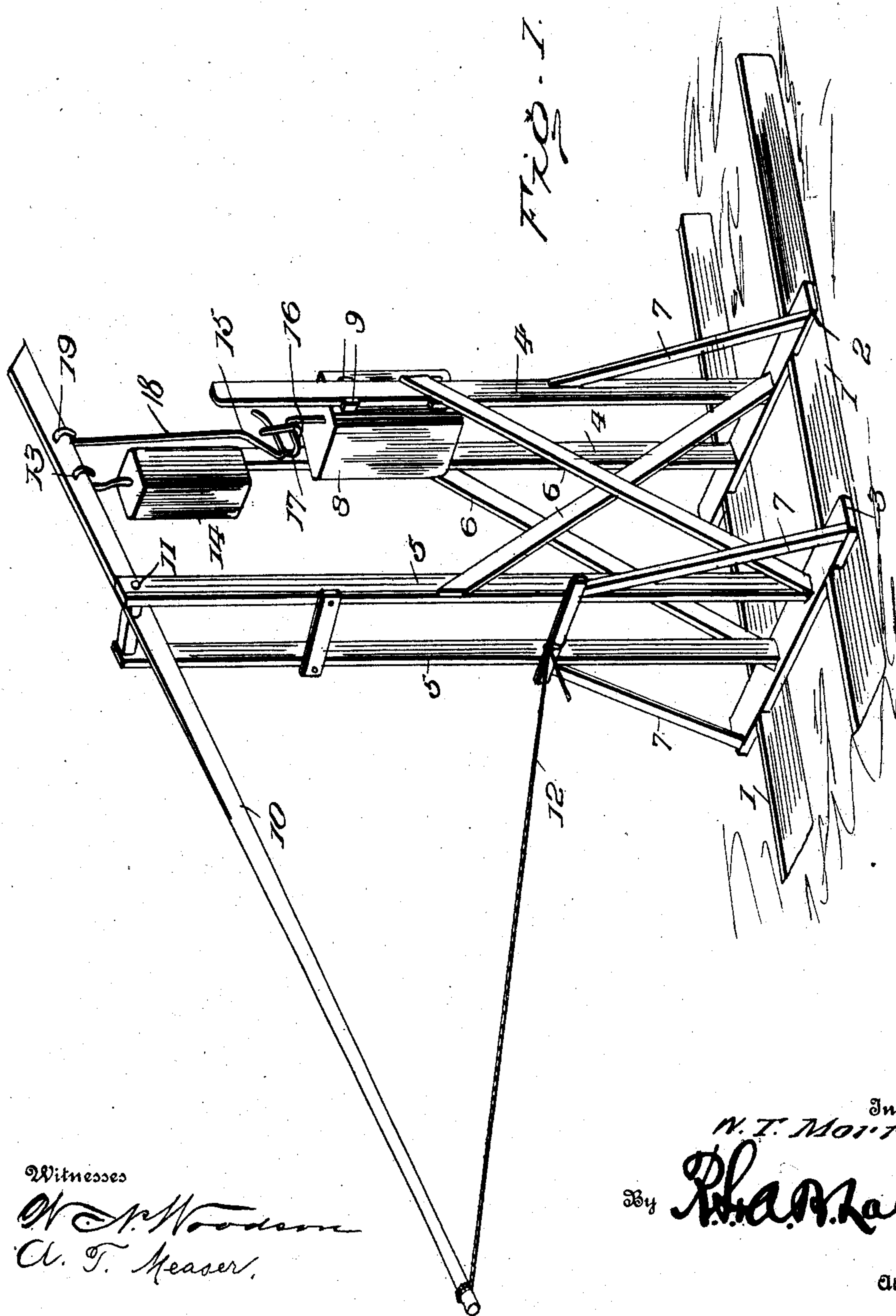
No. 864,181.

PATENTED AUG. 27, 1907.

W. T. MORRIS.  
POST DRIVER.

APPLICATION FILED JAN. 21, 1907.

2 SHEETS—SHEET 1.



Witnesses

*W. D. Woodson*  
*A. T. Measer.*

Inventor

*W. T. Morris*

By

*R. A. R. R. R.*

Attorneys

No. 864,181.

PATENTED AUG. 27, 1907.

W. T. MORRIS.  
POST DRIVER.

APPLICATION FILED JAN. 21, 1907.

2 SHEETS—SHEET 2.

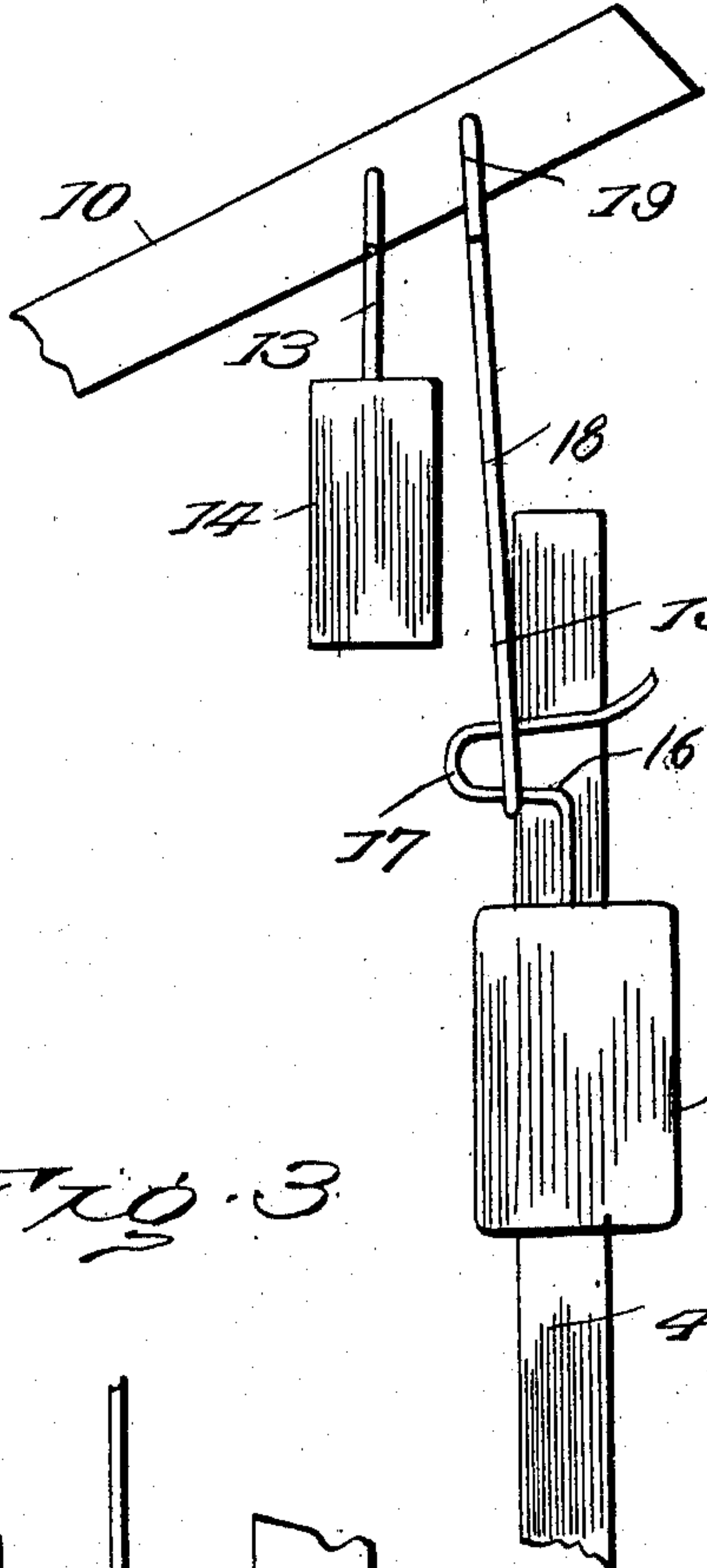
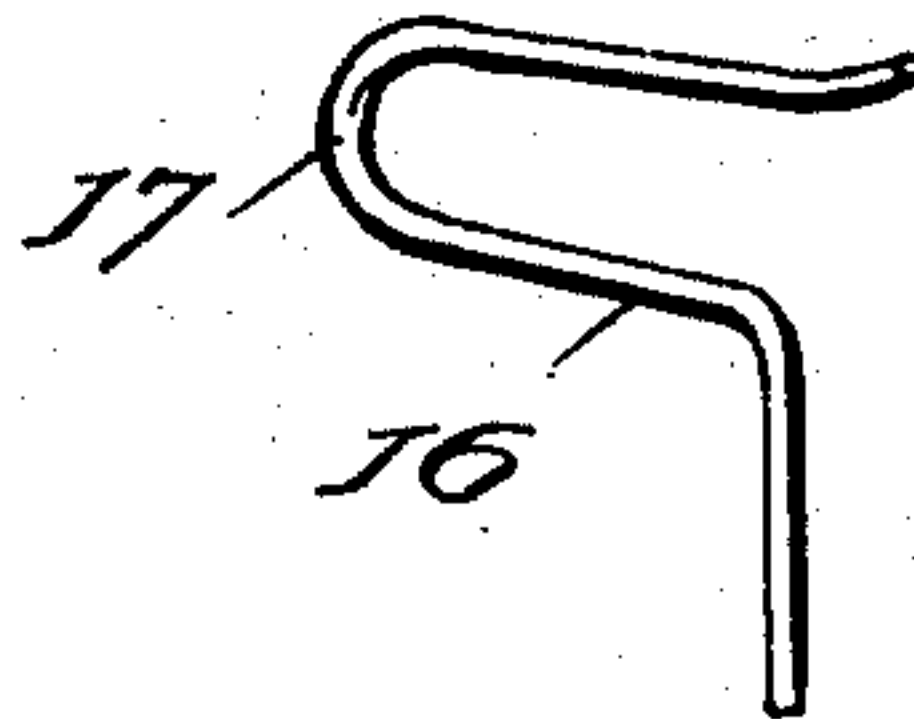
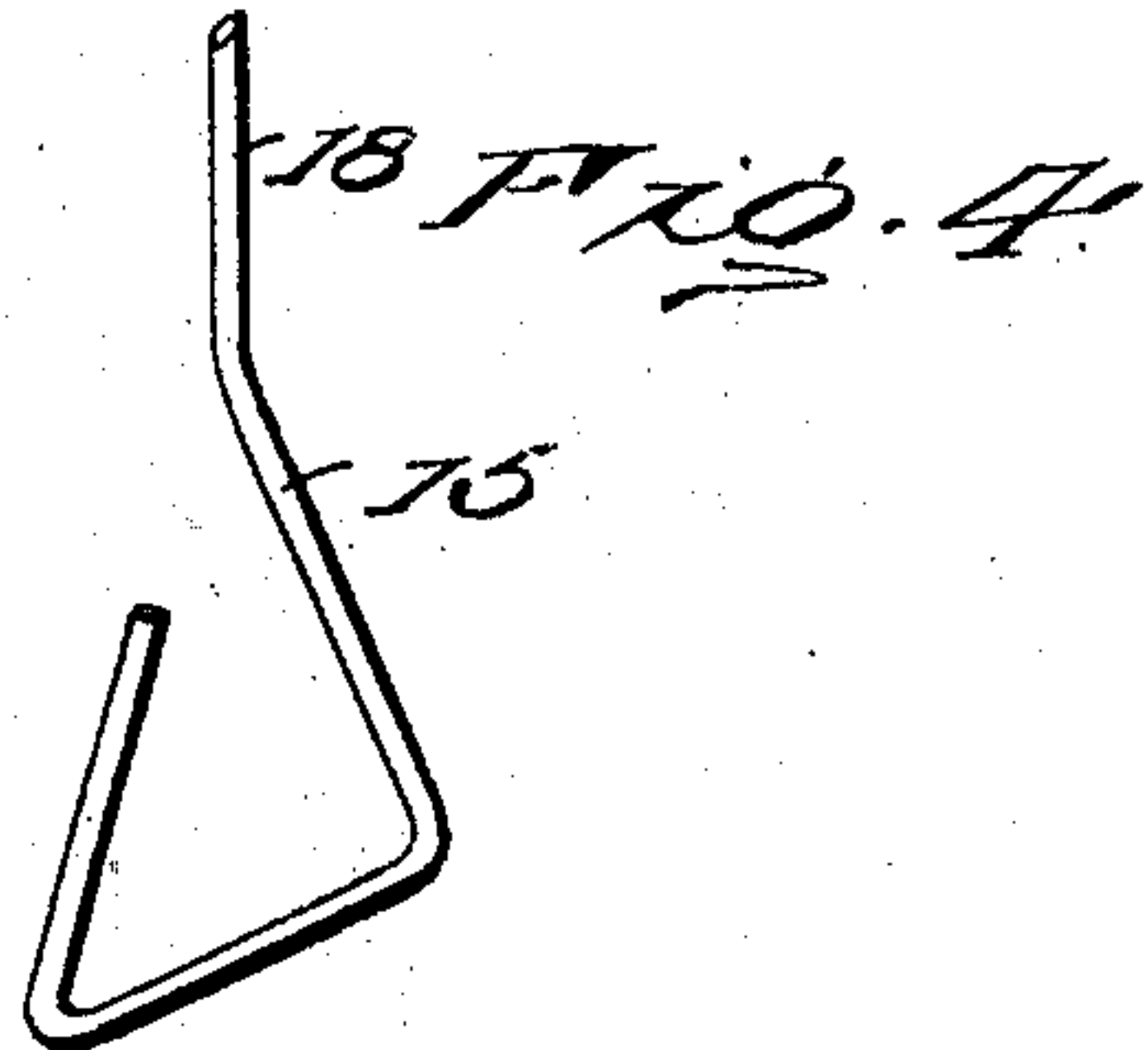
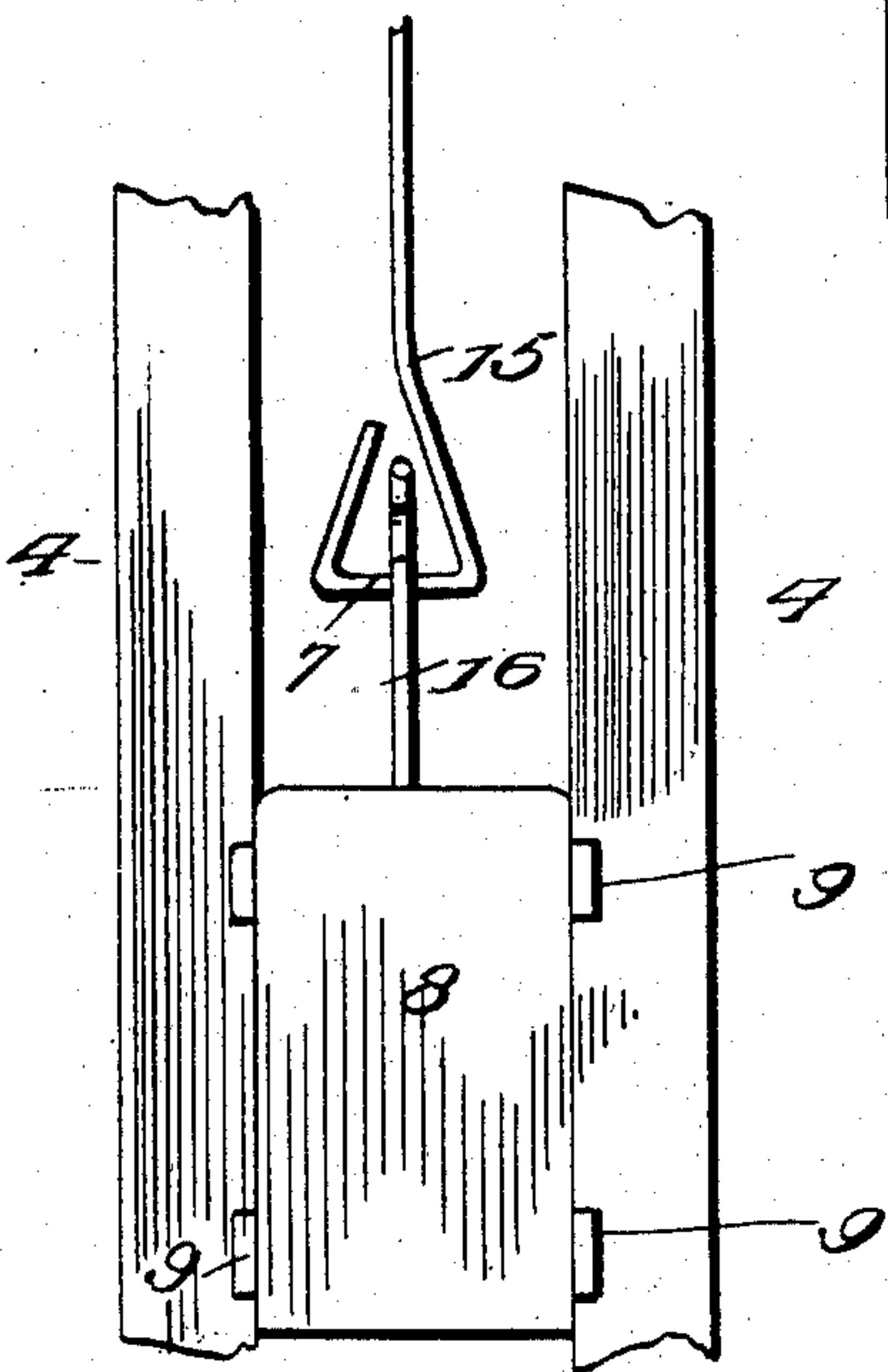


Fig. 3



Witnesses

*W. T. Morris*  
A. T. Measer.

Inventor

W. T. Morris

By

*R. A. H. H. H.*

Attorneys



# UNITED STATES PATENT OFFICE.

WILLIAM T. MORRIS, OF CABOT, ARKANSAS, ASSIGNOR OF ONE-HALF TO ARTHUR BLANKENSHIP, OF CABOT, ARKANSAS.

## POST-DRIVER.

No. 864,181.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed January 21, 1907. Serial No. 353,376.

*To all whom it may concern:*

Be it known that I, WILLIAM T. MORRIS, a citizen of the United States, residing at Cabot, in the county of Lonoke and State of Arkansas, have invented certain new and useful Improvements in Post-Drivers, of which the following is a specification.

The present invention relates to an improved device for the driving of posts, piles or the like, and more particularly to that type of these devices wherein a weight is slidably mounted between two upright guide members, means being provided whereby the weight can be released so as to fall upon the post, after the said weight has been elevated to the limit of its upward movement.

One of the essential features of the invention resides in the provision of a novel lever mechanism, whereby the weight is automatically elevated and dropped by the continued manipulation of an operating lever. With this object in view, a standard is mounted adjacent the upright guide members and a lever fulcrumed upon the standard, the connection between the lever and the weight being brought about by means of a catch which automatically releases the weight at the limit of the upward movement thereof.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of a post driver constructed in accordance with the present invention. Fig. 2 is a side elevation of a portion of the guide members and operating lever. Fig. 3 is a front elevation of the same. Fig. 4 is a detached perspective view of the catch connecting the weight and operating lever.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The post driving device comprising the present invention is preferably mounted so as to be readily transported from place to place, and in the present instance, is shown as supported upon a sled of which the numerals 1 designate the runners. The runners 1 are connected by means of a pair of cross-bars 2—3, the bar 2 supporting the upright guide members 4—4, and the bar 3, the upright standards 5—5 which are preferably somewhat longer than the said guide members. Corresponding guide members 4 and standards 5 upon opposite sides of the sled are connected by means of the intersecting diagonal braces 6, and brace members 7 are also employed to connect intermediate portions of the members 4 and 5 with the adjacent extremities of the cross bars 2 and 3. These braces serve to tie the various members

securely together and to give the framework a rigid construction. Slidably mounted between the two guide members 4—4 is a weight 8 which is designed to be dropped upon the post or pile after being elevated to the upper extremities of the said guide members. This sliding connection between the weight 8 and the guide members 4 is brought about in the present instance by means of lugs or projections 9 formed upon the weight 8 and fitting against opposite sides of the guide members 4.

The operating lever 10 is fulcrumed upon a transverse rod 11 connecting the upper ends of the standards 5—5, the short arm of the lever 10 extending over the guide members 4—4 while the long arm projects in the opposite direction and has the cable 12 connected to the extremity thereof. Suspended from the short arm of the lever 10 by means of a hook 13 passing removably through an opening therein is a weight 14 which overbalances the longer arm of the lever and normally draws the short arm thereof downwardly so that the stirrup 15 carried thereby is lowered into engagement with the catch 16 upon the weight 8.

In the specific construction of the catch 16 it will be observed that the same comprises a rod projecting upwardly from the top of the weight, the extremity of the rod being bent to form the lateral projecting U-shaped portion 17, the two arms of which are slightly diverged and the upper arm being somewhat longer than the lower arm. The stirrup 15 engaging the catch 16 is formed by looping the lower portion of a rod 18, the upper portion of which is hooked at 19 and detachably connected to the extremity of the short arm of the lever 10 by means of a transverse opening therein.

Owing to the fact that the operating lever 10 is fulcrumed upon the shaft 11 it will be apparent that as the same is reciprocated back and forth, the stirrup 15 pendent from the short arm thereof, will not only be moved up and down vertically, but will also have a limited amount of lateral movement. When the cable 12 is released so as to permit the weight 14 to pull the short arm of the lever forwardly, the stirrup 15 is brought into engagement with the catch 16 so that when the lever is operated in the reverse direction, the weight 8 is drawn upwardly between the guide members 4—4. At the limit of the upward movement of the weight 8, however, the lateral movement of the stirrup 15 is such as to draw the same inwardly and release it from engagement with the catch 16, thereby permitting the weight 8 to descend and strike against the post or other article being driven. It will thus be apparent that as the operating lever 10 is moved up and down, the weight 8 is repeatedly elevated be-



tween the guide members 4—4, and automatically released, after reaching the limit of its upward movement.

Having thus described the invention, what is claimed as new is:

1. The combination of a guide way, a weight slidably mounted within the guide way, a catch carried by the weight, an operating lever, and a stirrup pendent from the operating lever and designed to engage the catch upon the weight.
2. The combination of a guide way, a weight slidably mounted within the guide way, a catch upon the weight, an operating lever, and a stirrup pendent from the operating lever and designed to engage the catch upon the weight, the lateral movement of the stirrup due to the swinging of the lever operating to automatically release the weight at the limit of its upward movement.
3. The combination of a guide way, a weight slidably mounted within the guide way, a catch projecting from the weight and comprising a rod having a lateral projecting end, an operating lever, and a stirrup pendent from the operating lever and designed to engage the lateral projecting portion of the catch, the lateral movement of the stirrup due to the swinging of the lever operating to release the weight after the same has been elevated.
4. The combination of a guide way, a weight slidably mounted within the guide way, a catch projected from the weight and formed with an approximately U-shaped laterally extending portion, an operating lever, a stirrup pendent from the operating lever and designed to engage the U-shaped portion of the catch.
5. The combination of a guide way, a weight slidably

mounted within the guide way, a catch carried by the weight, an operating lever, a rod pendent from the lever and having the upper end thereof pivotally connected thereto while the lower end is looped and designed to engage the before mentioned catch upon the weight.

6. The combination of a guide way, a weight slidably mounted within the guide way, a standard located adjacent the guide way, brace means between the standard and the guide way, an operating lever fulcrumed upon the standard, and means whereby the weight can be operated within the guide way by manipulating the lever.

7. The combination of a pair of upright guide members, a weight slidably mounted between the guide members, a pair of upright standards located adjacent the guide members, brace means connecting corresponding standards and guide members, an operating lever fulcrumed between the standards, and means whereby the weight can be operated between the guide members by manipulating the before-mentioned lever.

8. The combination of a pair of upright guide members, a weight slidably mounted between the guide members, a catch carried by the weight, a pair of upright standards located adjacent the guide members, brace means connecting corresponding standards and guide members, an operating lever fulcrumed between the standards, and a stirrup carried by the operating lever and designed to engage the catch upon the weight.

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

WILLIAM T. MORRIS. [L. S.]

Witnesses:

J. W. LOWMAN,  
J. F. SEE.