

No. 681,182.

Patented Aug. 27, 1901.

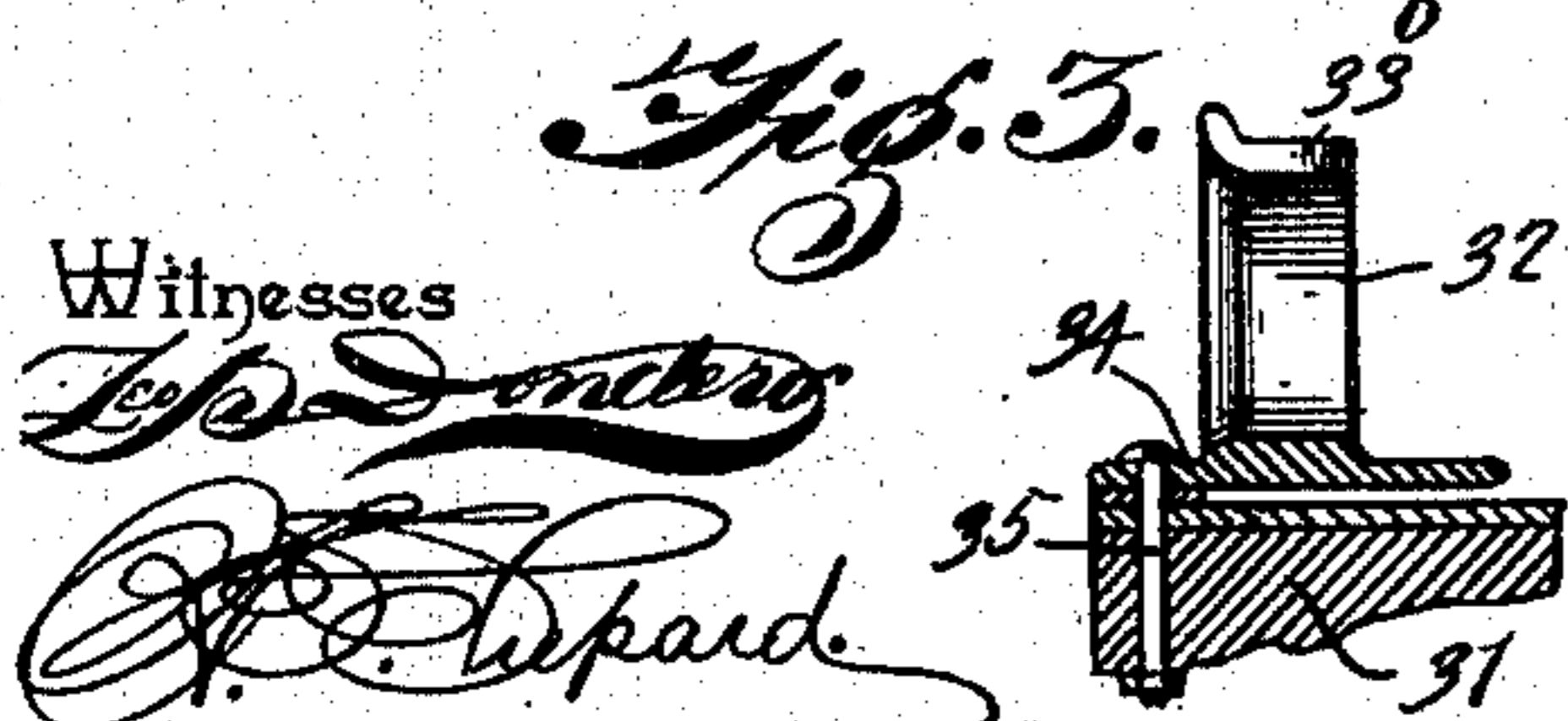
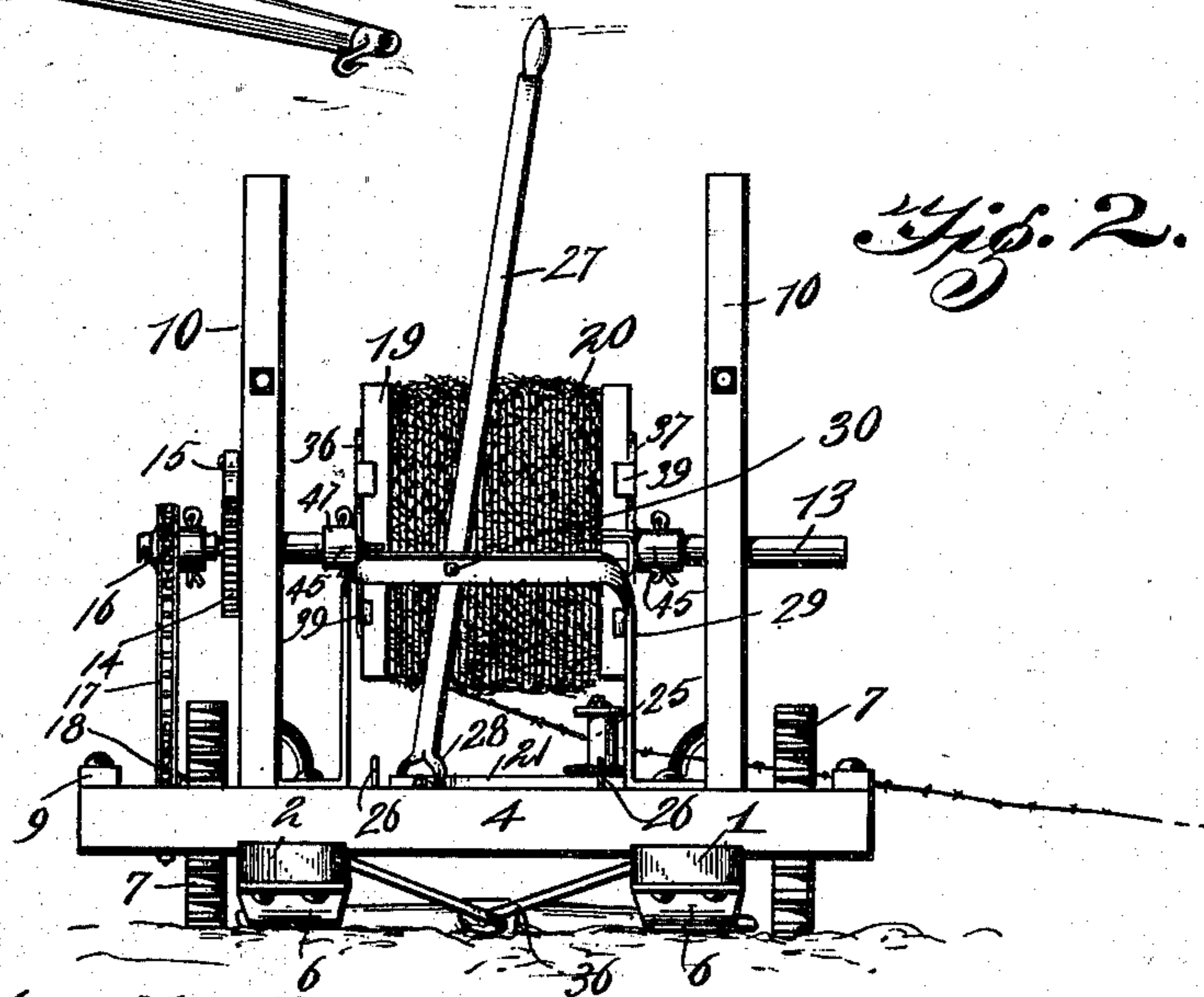
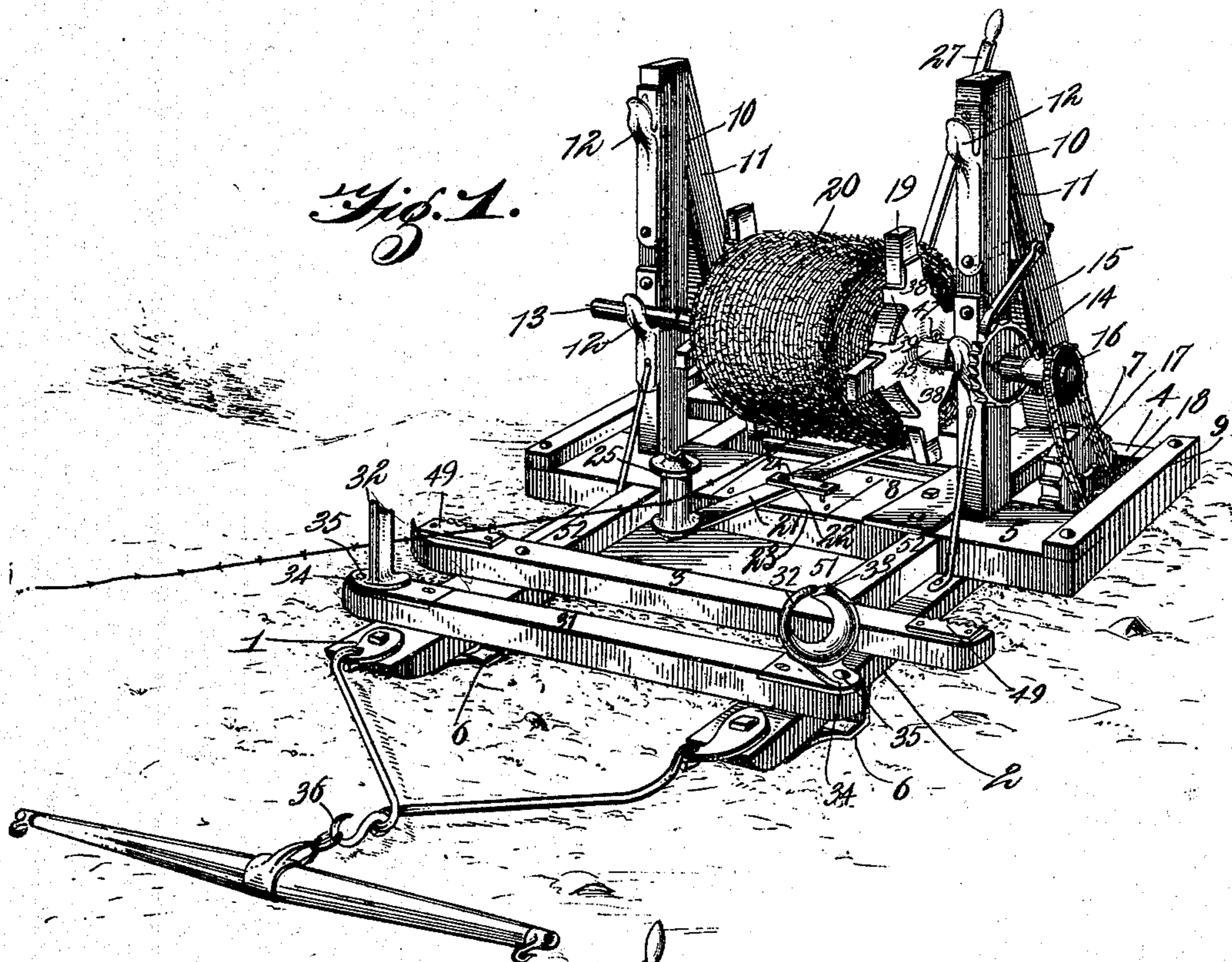
W. M. BARGER.

REEL CARRIER.

(Application filed Aug. 29, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses

Edw. Donahoe
A. E. Shepard

W. M. Barger Inventor
By *C. A. Snow & Co.* Attorneys

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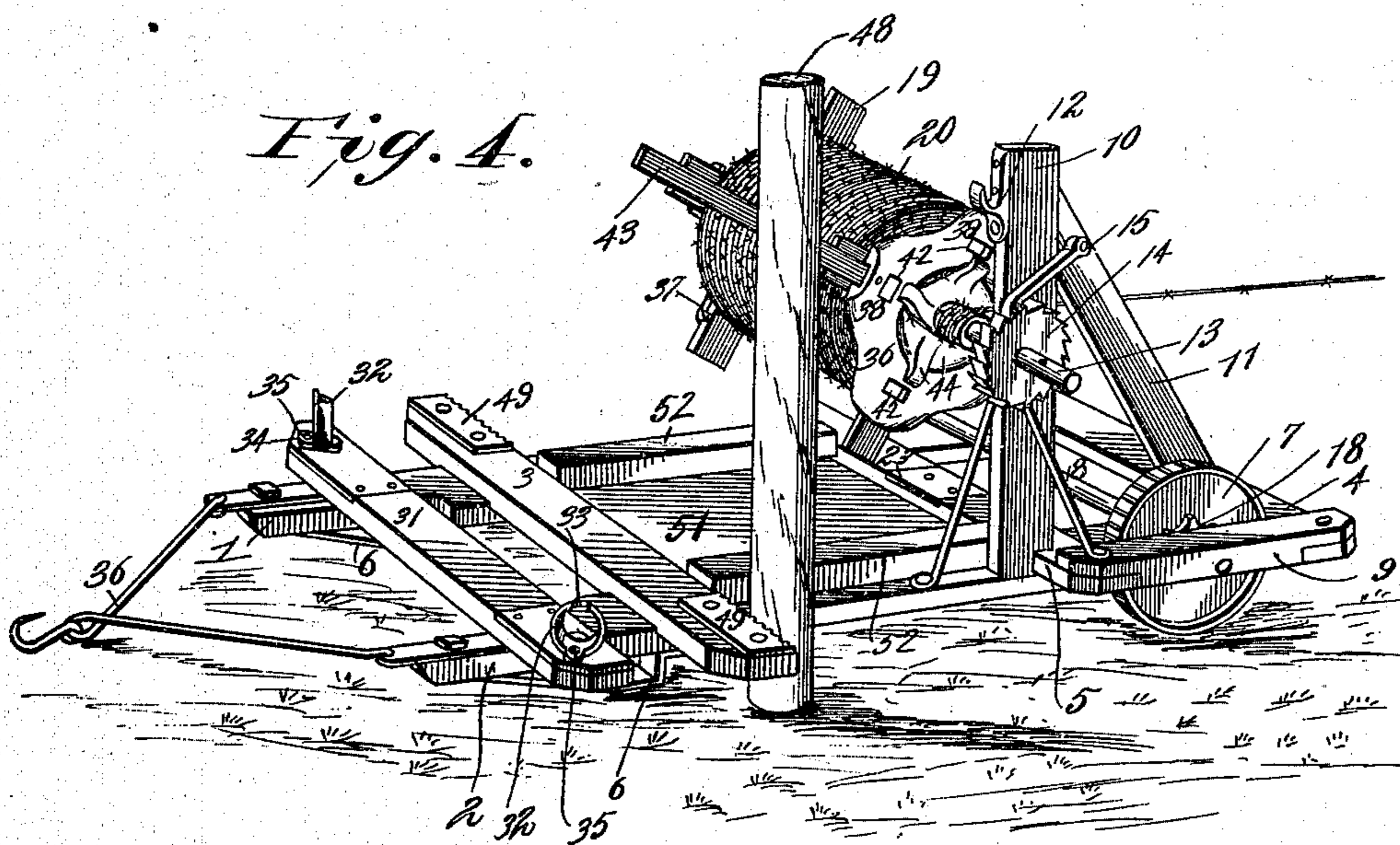


Fig. 5.

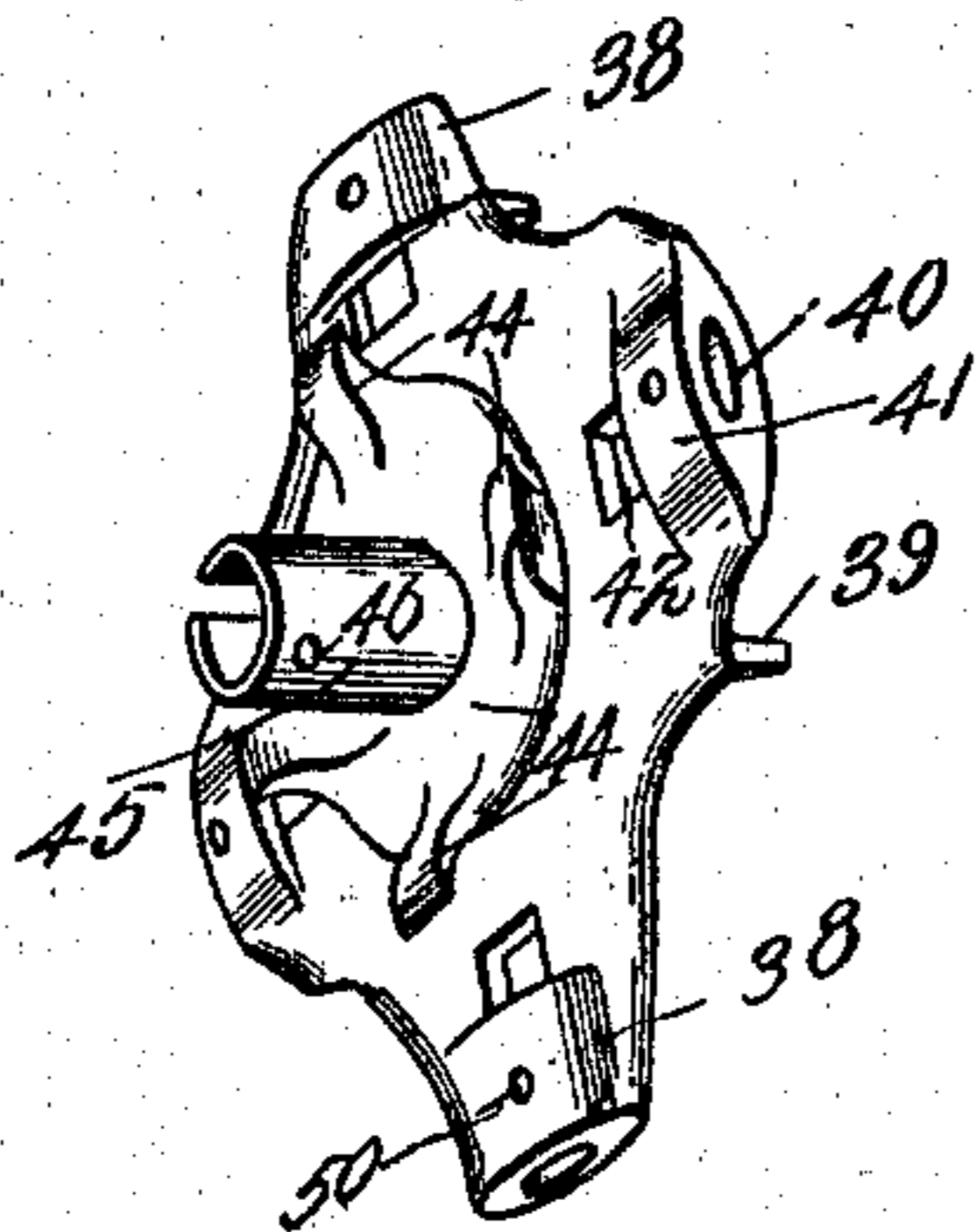
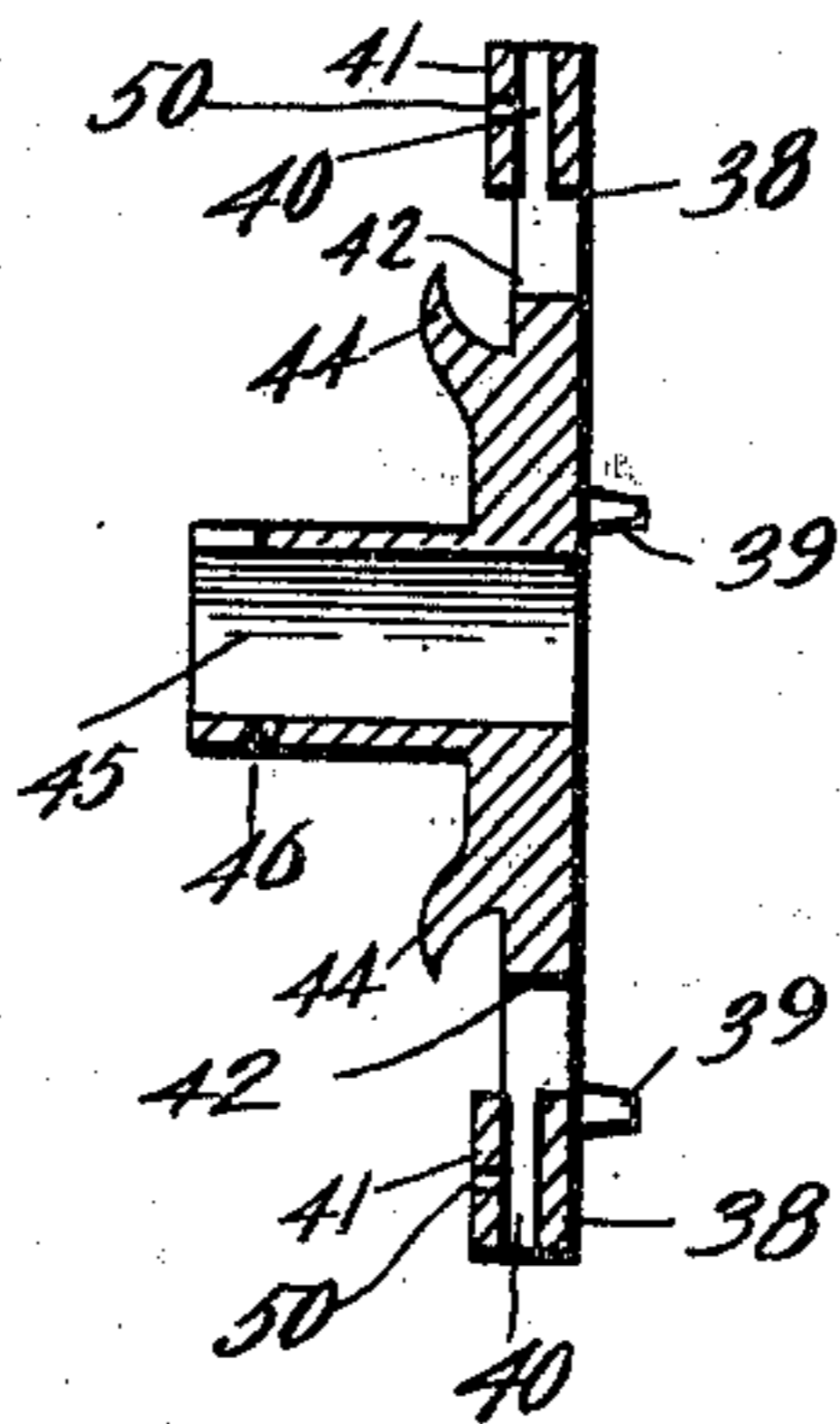


Fig. 6.



Witnesses

W. Walker.
E. Shepard.

By *W. M. Barger,* Inventor.
C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM M. BARGER, OF WEBSTER CITY, IOWA.

REEL-CARRIER.

SPECIFICATION forming part of Letters Patent No. 681,182, dated August 27, 1901.

Application filed August 29, 1900. Serial No. 28,467. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. BARGER, a citizen of the United States, residing at Webster City, in the county of Hamilton and State of Iowa, have invented a new and useful Reel-Carrier, of which the following is a specification.

This invention relates to reel-carriers for use in the construction of wire fences, and has for its object to improve the construction shown in my former patent, No. 567,213, granted September 8, 1896.

It is furthermore designed to provide improved means for reeling the wire onto the spool, so that the wire may be evenly and conveniently distributed over the spool.

A further object resides in the provision of an improved winding-head for the wire-spool, so that the turning of the latter may be facilitated, and to arrange for connecting the wire with the head for stretching the wire when a full or nearly full spool is mounted upon the device, so as to have a rigid connection with the winding-head, to effectively stretch the wire for connection with a post, and, finally, to arrange the frame of the carrier so as to operate the spool from the supporting-wheels of the device and to conveniently anchor the device to a post when stretching the wire.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of the improved reel-carrier, showing the means for guiding the wire onto the wire spool or reel. Fig. 2 is a rear elevation thereof. Fig. 3 is a detail sectional view of one of the swiveled guide eyes or rings that is mounted upon one of the front corners of the frame of the device. Fig. 4 is a perspective view of the device, showing the improved head for connecting the wire reel or spool to the rotatable shaft and the manner of connecting the wire to said head. Fig. 5 is a detail perspective

view of the head. Fig. 6 is a diametric section thereof.

Corresponding parts are designated by like characters of reference in all of the figures of the drawings.

Referring to the accompanying drawings, 1 and 2 designate the opposite longitudinal sills, which are connected by means of the front cross-bar 3, the rear cross-bar 4, and the intermediate cross-bar 5, thereby forming the frame of the present device. The fronts of the sills are supported upon bowed metallic straps 6, secured to the under sides of the front ends of the sills, so as to form runners, and the rear end of the frame is supported upon the opposite wheels 7, that are carried by a transverse shaft 8. This shaft is journaled in the opposite sills and located between the rear and intermediate cross-bars, and the wheels are located upon the outer sides of the sills and between the outwardly-projecting ends of the rear and intermediate sills, which are connected by the bars 9, thereby housing and protecting the wheels.

Rising from the sills and located at or adjacent to the intermediate cross-bar are the opposite standards or uprights 10, each of which is supported by means of a brace 11, inclining upwardly from the rear of the frame to the top of the standard. Secured to the front sides of the standards are the pairs of laterally-alined journal-bearings 12 for the support of the reel-carrying shaft 13. Upon one end of this shaft and adjacent to the outer side of one of the standards is a ratchet-wheel 14, with which engages a ratchet-pawl 15, pivoted above the ratchet-wheel and upon the adjacent brace 11. Removably fitted to the adjacent end of the shaft is a sprocket-wheel 16, which is driven by an endless sprocket-chain 17, that runs over a sprocket-wheel 18, fixed to the adjacent end of the shaft 8. A reel or spool 19 is mounted to turn with the shaft 13, and wound upon this spool is a bundle of fence-wire 20.

Located below the spool or reel is a wire-shifting lever 21, which extends longitudinally of the frame and is fulcrumed intermediate of its ends upon the intermediate cross-bar, as indicated at 22. A suitable wear-plate 23 is secured to the top of the intermediate cross-bar, and a pair of the pivot-

pins 22 rise from this plate, so that the lever 21 may be fulcrumed upon either pin, and a metallic strap 24 connects the upper ends of these pins and extends transversely across the upper side of the lever. Suitable nuts are fitted to the upper extremities of the pins, so as to removably hold the plate in position. By this arrangement the shifting-lever may be adjusted laterally, as may be required.

The forward end of the lever projects a suitable distance in front of the spool and is provided with an upstanding roller 25, that is pivotally mounted upon the lever. The rear end of the lever travels laterally over the rear cross-bar and is limited in its movement by the opposite stop-pins 26, that rise from the rear cross-bar and are adjustable longitudinally thereof by means of suitable perforations formed in the cross-bar. For adjusting the shifting-lever there is provided an upright lever 27, which has its lower end forked, as at 28, so as to embrace the rear end of the shifting-lever. To support the operating-lever, an inverted substantially U-shaped or yoke-shaped metal frame 29 is provided with its opposite ends supported upon the rear cross-bar and at the outer sides of the respective stop-pins 26. The lever is fulcrumed intermediate of its ends to the upper transverse portion of this frame, as indicated at 30.

Located adjacent to the forward end of each of the frame-sills and preferably upon the adjacent end of a cross-bar 31 is a wire guide eye or ring 32, which is split upon its upper side, as at 33, and is provided at its lower side with a forwardly-projecting ear 34, which is pivotally connected to the sill or the cross-bar by means of a suitable pivot-pin 35, thereby swiveling the eye or ring to the frame.

For convenience in moving the device any suitable draft connection 36 may be provided at the forward end of the frame.

In using the device to rewind a wire strand upon a spool or reel, the adjacent end of the wire is passed through one of the guide-eyes 32, then across the roller 25 upon the shifting-lever, and finally connected to the spool, after which the device is drawn forwardly, so as to turn the spool in the same direction through the medium of the connections between the spool and the shaft 8, thereby winding the wire upon the spool and the device being advanced as fast as the wire is taken up by said spool. It will now be apparent that the operating-lever 27 is gradually moved from one side of the device to the other, so as to similarly move the shifting-lever 21, and thereby guide the wire properly upon the spool by means of the guiding-roller 25, as will be readily understood. Each guide-ring 32 is pivotally mounted, so as to conform to the direction of the wire as it is guided to the spool by the shifting-lever. It will be observed that the pivotal support of the guide-eye is in advance of the eye proper,

so that the latter swings in the arc of a circle in rear of said support, so as to have a comparatively long path or range of adjustment to accommodate itself to the wire, and thereby prevent the barbs from hanging in the sides of the guide, as would happen if the guide had an axial pivotal support. By this means a long length of barbed or other fence wire may be removed from a fence and placed upon the ground and then wound upon a spool in a convenient and effective manner.

To convert the device into a wire-stretcher, as best shown in Fig. 4 of the drawings, the sprocket-chain 17 and the sprocket-wheel 16 are removed, so that the spool-shaft 13 may be operated by hand. In both forms of the device the wire-spool is fixedly connected to the shaft 13 by means of opposite heads 36 and 37, which are duplicates, one of which has been illustrated in detail in Figs. 5 and 6. Each head is formed by a flat metallic plate having two pairs of diametrically opposite arms 38, that are designed to fit flat against the corresponding arms of the ordinary wire reel or spool 19. Projecting laterally at the inner side of the plate and from the rear edge of each arm is a stop-lug 39, which is designed to bear against the rear side of the adjacent arm of the spool, so that the latter is forced to turn with the head. In the outer end of each arm of the head there is provided a radial recess 40, which is spanned at its outer end by a bridge-wall 41, which forms a radial socket 42 for the reception of one end of a bar or handle 43, whereby the head may be turned in the manner of a hand-operated windlass. Between the center of the head and adjacent to the inner end of each socket there is provided an outwardly-directed hooked lug 44, which has its convex side adjacent to the center of the head, all of the lugs being arranged in a circular series. The hub 45 of the head is also extended for a suitable distance at the outer side thereof and is provided with a perforation 46 for the reception of a suitable pin or fastening 47 to fixedly connect the head to the spool-shaft 13.

In using the device as a wire-stretcher, the rear side of one of the projecting ends of the forward cross-bar 3, which forms a post-engaging shoulder, is placed against the adjacent post 48, the cross-bar being provided with a toothed plate 49 to prevent the bar from slipping upon the post. A suitable handle or bar 43 is then placed in one of the radial sockets of one of the heads and employed as a lever to turn the spool or reel, and thereby wind the wire upon the latter to stretch that portion of the wire which is connected to the fence-posts.

It sometimes occurs that a spool of wire runs out just before reaching a fence-post and it becomes necessary to connect a new spool to the end of the wire and then stretch the same to the post for attachment thereto. In this event it is quite impossible to properly stretch the wire on account of the amount of

wire wound upon the spool. To overcome this difficulty, the wire is lifted over one arm of the spool and engaged with one of the hooked lugs 44, after which the spool is
 5 turned so as to obtain one or more turns of the wire upon all of the hooks, and then the wire is lifted over upon the tubular extended portion of the hub 45, so that the remainder of the slack may be wound upon the hub. By
 10 this means a firm connection is had between the wire and the head, so that the wire does not slip thereon, but is effectively wound upon the hub. Also by winding the wire upon the hub a straighter and more direct
 15 pull is obtained upon the wire being stretched, whereby there is no twist or lateral strain upon the head nor upon the spool, and there is no danger of breaking the latter. Should the wire be designed to be fastened to the ad-
 20 jacent post—as, for instance, an end post—the rear cross-bar of the device is run up against the post, as will be understood.

When it is designed to wind the wire upon the spool by hand, the spool-shaft is placed
 25 in the uppermost bearings, and each socket in the head is provided with a handle bar or lever, which is fixedly held to the head by means of a suitable fastening inserted through an opening 50, formed in the bridge or outer
 30 wall of the socket, the levers being of a length as will pass over the frame without striking the same.

The frame of the device is provided with a convenient tool-box by flooring over that
 35 portion of the frame which lies between the front and intermediate cross-bars, as indicated at 51, and placing the opposite beams 52 upon the flooring and between the said cross-bars, so that the latter and the beams form the four
 40 sides of the box.

What is claimed is—

1. In a device of the class described, the combination of opposite longitudinal sills,

front, intermediate and rear cross-bars connecting the sills, the ends of the intermediate 45 and rear cross-bars extending at opposite sides of the sills, end bars connecting the adjacent ends of the intermediate and end cross-bars, a transverse shaft mounted in the end bars, opposite wheels mounted upon the shaft 50 and located between the adjacent end bars and sills, a reel-carrying windlass mounted in front of the shaft, a sprocket-wheel carried by the windlass, a sprocket-wheel upon the shaft, and a sprocket-chain connecting the 55 two sprocket-wheels.

2. In a device of the class described, the combination with a frame, of a reel-carrying windlass mounted thereon, opposite pivot-pins rising from the frame, a lever removably 60 mounted upon one of the pins, a plate connecting the pins and extending across the upper side of the lever, removable fastenings holding the plate in place, and a wire-engaging guide carried by the forward end of the 65 lever.

3. In a device of the class described, the combination with a frame, and a reel-carrying windlass mounted thereon, of a reel-engaging head mounted upon the windlass, and 70 having a concentric series of wire-engaging lugs projected laterally upon the outer face thereof.

4. A reel-engaging head, having a radial series of sockets formed in its peripheral edge, 75 a cylindrical hub extended at the outer side of the head, and a concentric series of wire-engaging hooked lugs located between the hub and the sockets.

In testimony that I claim the foregoing as 80 my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM M. BARGER.

Witnesses:

W. J. ZITTEULL,
 E. W. CLINTON.