E. B. MOORE.

POWER PULLEY.

APPLICATION FILED FEB. 19, 1916.

1,206,019. Patented Nov. 28, 1916.

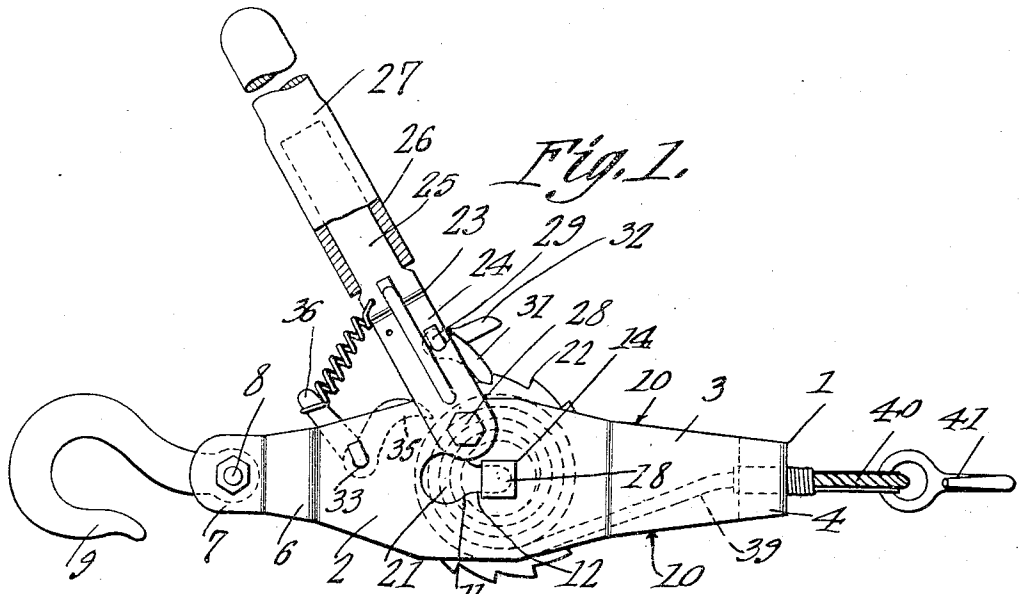


Fig. 1.

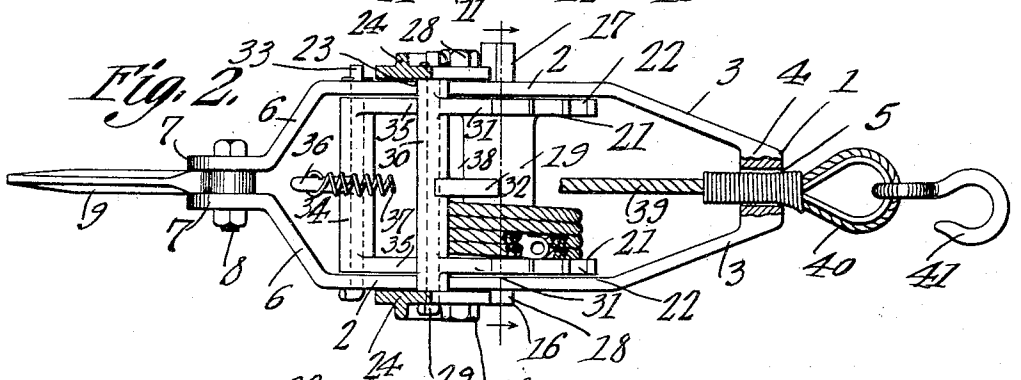


Fig. 2.

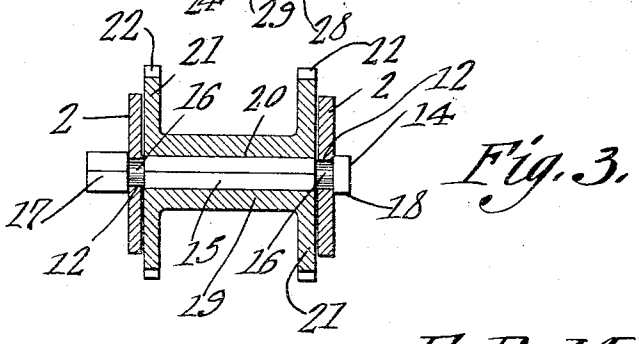


Fig. 3.

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# UNITED STATES PATENT OFFICE.

EDWARD BROWN MOORE, OF NEWARK, OHIO.

## POWER-PULLEY.

1,206,019. Specification of Letters Patent. Patented Nov. 28, 1916.

Application filed February 19, 1916. Serial No. 79,372.

*To all whom it may concern:*

Be it known that I, EDWARD BROWN MOORE, a citizen of the United States, residing at Newark, in the county of Licking and State of Ohio, have invented a new and useful Power-Pulley, of which the following is a specification.

The device forming the subject matter of this application is a pulley or windlass adapted to be suspended from a suitable support and carrying a drum whereon a cable is adapted to be wound.

The invention aims to provide novel means for mounting and rotating the drum, and to provide novel means for operatively mounting and connecting the feed pawls and the back stop pawls which coact with ratchets and the drum.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the present invention appertains.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein described can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawing: Figure 1 shows the invention in side elevation, parts being broken away; Fig. 2 is a top plan wherein parts are broken away; Fig. 3 is a cross section.

In carrying out the present invention there is provided a frame 1 embodying side arms 2 having forward extensions 3 which converge, the extensions 3 being formed integrally with a head 4 which is thicker than the extensions 3. The head 4 is equipped with an opening 5. The side arms 2 of the frame terminate at their rear ends in converging extensions 6 having parallel ears 7 supporting a pivot element preferably a bolt 8, the bolt serving as a mounting for a hook 9, whereby the frame 1 may be upheld from a support of any desired sort. The upper and lower edges 10 of the side arms 2 converge at the ends of the frame 1, thereby to make the side arms of greatest width intermediate the ends of the frame 1, this construction, obviously, serving to increase the strength of the frame. In the side arms 2 of the frame are formed key hole slots 11 having reduced, forwardly prolonged extensions 12.

The invention comprises a shaft denoted generally by the numeral 14, the shaft embodying a rectangular intermediate portion 15, circular journaling parts 16, a squared turning head 17 and a shoulder 18 which may be a nut.

The invention comprises a drum 19 having a rectangular bore 20. The squared intermediate part 15 of the shaft 14 is mounted in the bore 20 and the nut 14 is mounted on one end of the shaft, the nut being fixed permanently to the shaft, if desired.

In practical operation, the drum 19 is placed between the side arms 2, the shaft 14 is thrust endwise into the drum, the shaft passing through the larger portions of the keyhole slots 11. Then the drum 19 and the shaft 14 are advanced, whereupon the journaling parts 16 of the shaft will be located in the extensions 12 of the keyhole slots 7, as shown in Fig 1. The foregoing construction embodies a simple but efficient means whereby the shaft and the drum are detachably assembled with the frame 1. The drum 19 embodies side walls 21 provided with peripheral ratchets 22. For the operation of the drum 19 there is provided a yoke 23 having side arms 24 and embodying a shank 25 adapted to be received within the socket 26 of a handle 27, of any desired length. By means of pivot elements 28, the side arms 24 of the yoke 23 are connected to the side arms 2 of the frame 1, so that the yoke may be swung to and fro. The side arms 24 of the yoke 23 are connected by a shaft 29 on which is mounted to rock a tube 30. Formed integrally with the tube 30 adjacent its ends are feed pawls 31, adapted to coact with ratchets 22 of the drum 19. Formed integrally with the tube 30 and located between the feed pawls 31 is a forwardly presented finger 32, whereby the feed pawls 31 may be lifted out of engagement with the ratchets 22 when desired. To the rear of the drum 19, the side arms 2 of the frame 1 are connected by a shaft 33. Mounted to rock on the shaft 33 is a tube 34 provided adjacent its ends with integrally formed back stop pawls 35 adapted to coact with the ratchets 22. Intermediate the back stop pawls 35, the tube 34 is

equipped with a rearwardly inclined, integrally connected finger 36.

The numeral 37 designates a retractile spring, preferably of the helical type, the spring 37 being connected at its rear end with the finger 36, and being connected at its forward end with the crown of the yoke 23, a little to one side of the shank 25. The yoke 23 exercises a double function, in that it serves to operate the feed pawls 31 and serves, also, to tighten the spring 37 and to maintain the back stop pawls 35 engaged with the ratchets.

The numeral 39 indicates a flexible element which may be a cable. The cable 39 is passed through the opening 5 in the head 4 of the frame 1 and at its rear end is brazed or secured in any other desired manner to the drum 19. The forward end of the flexible element 39 terminates in an eye 40 pivotally assembled with a hook 41.

In practical operation, when the yoke 23 is rocked to and fro, the feed pawls 31 will rotate the drum 19 and reel in the cable 39, the back stop pawls 35 exercising their obvious function.

Having thus described the invention, what is claimed is:—

In a device of the class described, a frame embodying side arms; a drum journaled between the side arms and including rims having ratchets; a yoke-like lever comprising side arms; pivot elements uniting the side arms of the lever with the side arms of the frame; a shaft extended between the side arms of the lever; a tube mounted to rock on the shaft and provided with feed pawls coacting with the ratchets, the tube having a forwardly presented finger located between the feed pawls; a second shaft connecting the side arms of the frame; a tube mounted to rock on the second shaft, the said tube being provided with back-stop pawls coacting with the ratchets and being provided with a rearwardly inclined finger located between the back stop pawls; and a retractile spring connected at its rear end with the last specified finger, and connected at its forward end with the lever.

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

EDWARD BROWN MOORE.

Witnesses:
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**Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."**