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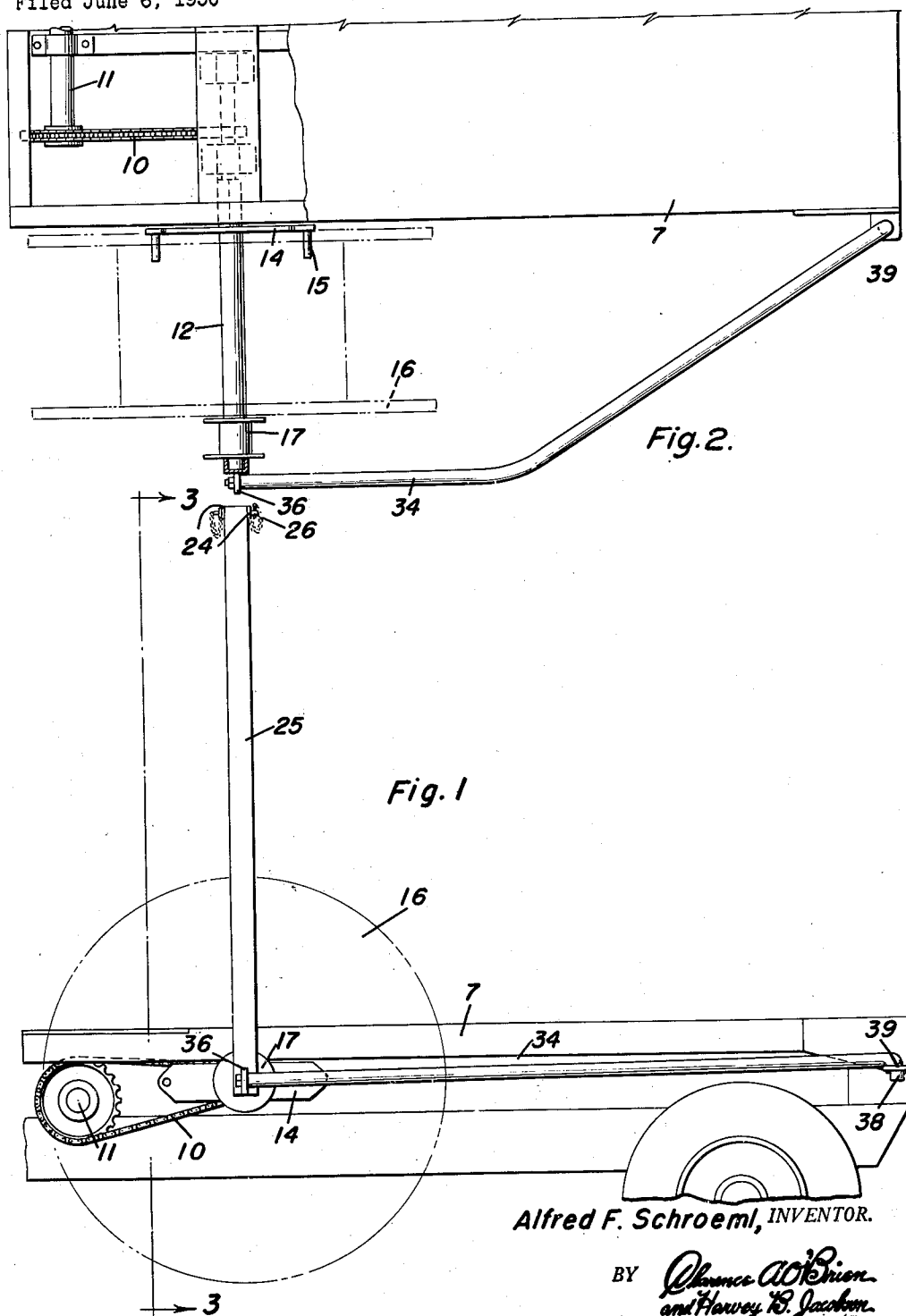
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POWER-OPERATED REEL AND REEL HOIST FOR TRUCKS

Filed June 6, 1950

2 SHEETS—SHEET 1



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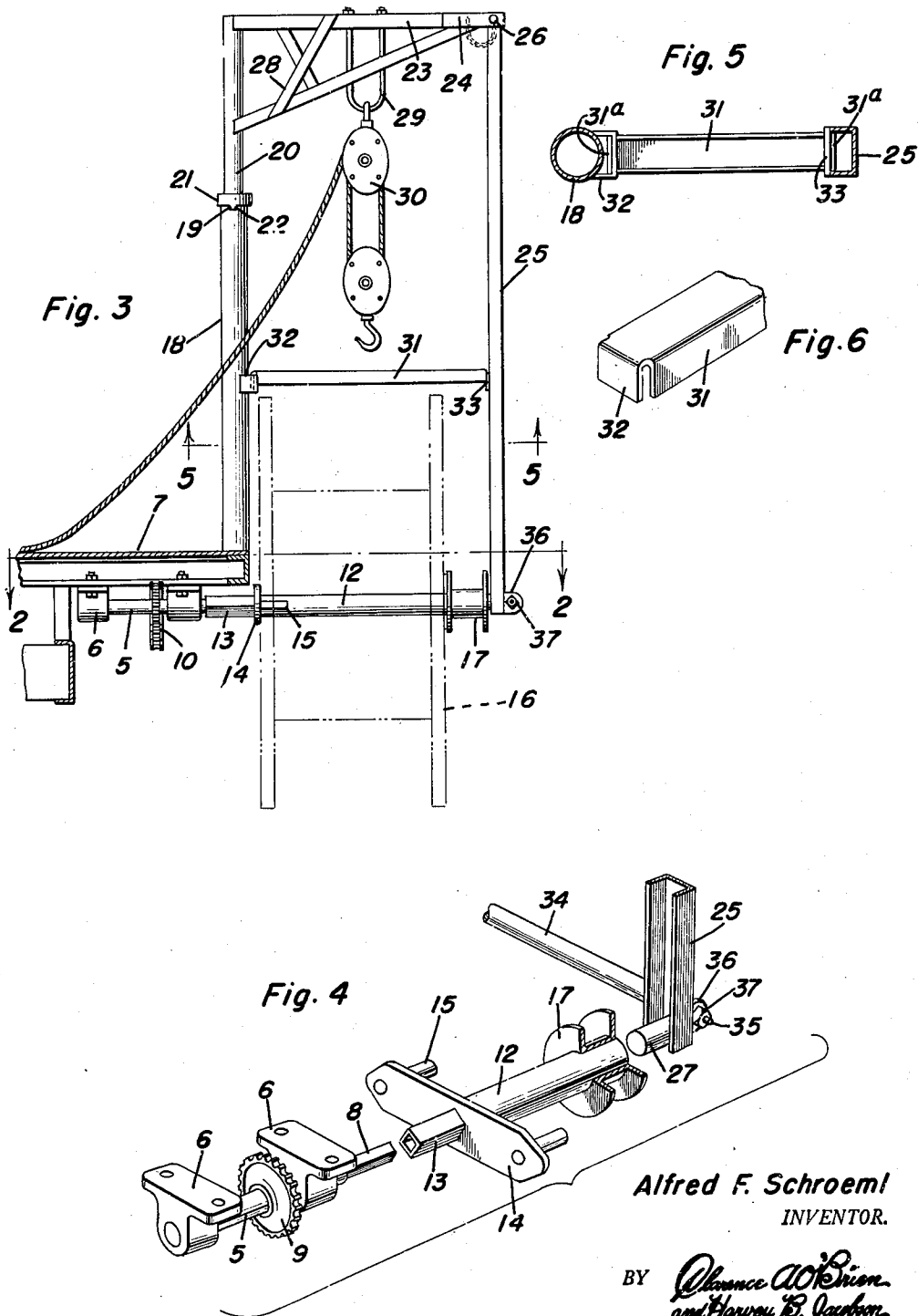
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2 SHEETS—SHEET 2



UNITED STATES PATENT OFFICE

2,616,637

POWER-OPERATED REEL AND REEL HOIST
FOR TRUCKS

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3 Claims. (Cl. 242-90)

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The present invention relates to new and useful improvements in power operated reels and more particularly to a reel attachment for trucks to facilitate the rewinding of electric conductors onto the original reels when changing transmission or distribution lines, and for other purposes.

An important object of the invention is to provide an easily demountable reel supporting and rotating shaft connected to a permanently mounted shaft carried at the side of a truck body and driven by the usual power winch of the truck.

Another object is to provide a novel swingable hoist mechanism movable into and out of hoisting position over the reel whereby the hoist may be moved into an unobstructing position inwardly at the side of the truck, when not in use, and whereby the demountable shaft and hoist mutually support each other when in use.

A further object is to provide a device of this character of simple and practical construction, which is strong and durable, relatively inexpensive to manufacture and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a side elevational view;

Figure 2 is a top plan view;

Figure 3 is a front elevational view;

Figure 4 is an enlarged group perspective view of the demountable shaft;

Figure 5 is an enlarged sectional view taken on a line 5-5 of Figure 3; and

Figure 6 is an enlarged fragmentary perspective view of one end of the cross brace for the hoist uprights.

Referring now to the drawings in detail, wherein for the purpose of illustration I have disclosed a preferred embodiment of my invention, the numeral 5 designates a shaft journaled in bearing brackets 6 at the underside of a truck bed 7 in a transverse position and provided with a squared end 8 at one side edge of the truck bed.

A sprocket 9 is secured to the shaft and is driven by a chain 10 from the shaft 11 of a regular power winch (not shown) of the truck.

A demountable tubular shaft 12 is formed with a hollow squared end 13 sleeved over squared end 8 of shaft 5, and a crossbar 14 is welded to

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shaft 12 at the junction of squared end 13, the crossbar having a pair of pins 15 at its ends for insertion in the usual holes (not shown) of a cable reel 16 removably mounted on shaft 12. A spacing spool or washer 17 is positioned on the outer end of shaft 12.

A hollow post 18 is welded or otherwise secured at its lower end to truck bed 7 adjacent its side edge and with a pair of notches 19 in its upper end at 90° from each other. An upper post 20 is rotatable in fixed post 18 with a collar 21 at its lower portion resting on the upper edge of post 18 and formed with a locking lug 22 selectively engaged in one of the notches 19.

A beam 23 is welded to the upper end of rotatable post 20 with a fork 24 at its outer end and in which the upper end of an upright support 25 is detachably secured by a pin 26. The lower end of support 25 is provided with a stub shaft 27 on which the outer end of shaft 12 is journaled.

Braces 28 are provided for beam 23 and a U-shaped hanger 29 is secured to the beam to extend downwardly therefrom and to which a block and tackle 30 is attached for lifting the reel 16 onto and off of shaft 12.

A channelled cross brace 31 is formed with downwardly extending locking tongues 31a at its ends engaged in sockets 32 and 33 carried by post 18 and support 25 to brace the latter. The lower end of support 25 and shaft 12 are also braced by a horizontal bar 34 having a threaded stud 35 at one end secured in an eye 36 at the lower end of support 25 by a nut 37 and the other end of bar 34 is formed with a downturned dent 38 engaged in an anchor plate 39 at the side of the truck bed.

In the operation of the device, shaft 5 and post 18 are mounted on the truck bed 6 adjacent one side thereof as permanent attachments, and in a position for driving shaft 5 by a suitable power source, such as the power winch (not shown) with which power line repair trucks are usually equipped.

Removable shaft 12 may then be easily and quickly sleeved onto squared end 8 of shaft 5 to drive shaft 12.

Rotatable post extension 20 is normally carried in fixed post 18 with the beam 23 swung inwardly parallel to the side of the truck, and with support 25 and horizontal brace 34 removed.

When it is desired to wind a cable on reel 16, the rotatable post 20 is raised slightly to disengage lug 22 from notch 19 and beam 23 is then swung outwardly at right angles to the side

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of the truck and lug 22 again locked in one of the notches 19. Block and tackle 29 is then used to hoist the reel onto shaft 12 and locked to the shaft by the pins 15. Spacing spool or sleeve 17 is placed on the outer end of shaft 12 and support 25 attached at its upper end to beam 23 and stub shaft 27 inserted in the outer end of shaft 12 to support the latter. Brace 31 is then attached to post 18 and support 25 by inserting tongues 31a in sockets 32, 33, whereby to lock said support 25 against outward swinging and thus lock stub shaft 27 in the outer end of the shaft 12 and squared end 13 of shaft 12 on squared end 8 of shaft 5. This also locks reel 16 between crossbar 14 and spacer or spool 17. Brace 34 is then placed in position to relieve the shaft 12 of strain caused by the pulling of the cable during winding thereof on the reel.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the device will be quite apparent to those skilled in this art. A more detailed description is accordingly deemed unnecessary.

It is to be understood, however, that even though there is herein shown and described a preferred embodiment of the invention the same is susceptible to certain changes fully comprehended by the spirit of the invention as herein described and the scope of the appended claims.

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

1. The combination with a truck bed, of a horizontal power driven shaft journaled under the bed and having an outer end adjacent one side of the bed, a demountable reel carrying and driving shaft having a socketed outer end and an inner end connected to said end of said driven shaft, a driving connection between said demountable shaft and reel, a post rising from said side of the bed, a horizontal beam carried

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at the upper end of said post and projecting over said demountable shaft, a vertical support provided with a stub shaft in said socket for rotatably supporting the outer end of said demountable shaft and being slidable out of said socket to release said demountable shaft, a pivotal connection between the upper end of said support and said beam whereby said support is swingable to slide said stub shaft out of said socket, a brace, and means attaching said brace to said post and support to prevent swinging of said support comprising detachable connections whereby said brace is detachable to provide for swinging of said support.

2. The combination according to claim 1 wherein said beam is rotatably connected to said post for horizontal swinging to swing said support into an out-of-the-way position facilitating demounting of said demountable shaft.

3. The combination according to claim 1 wherein a horizontal brace extends between the lower end of said support and said bed to hold said stub shaft aligned with said demountable shaft, said horizontal brace and support being provided with detachable connections whereby said horizontal brace and support may be disconnected to provide for swinging of said support.

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