Sept. 28, 1954 L. R. LUNDGREN ET AL 2,690,055

POST DRIVING DEVICE

Filed March 16, 1951

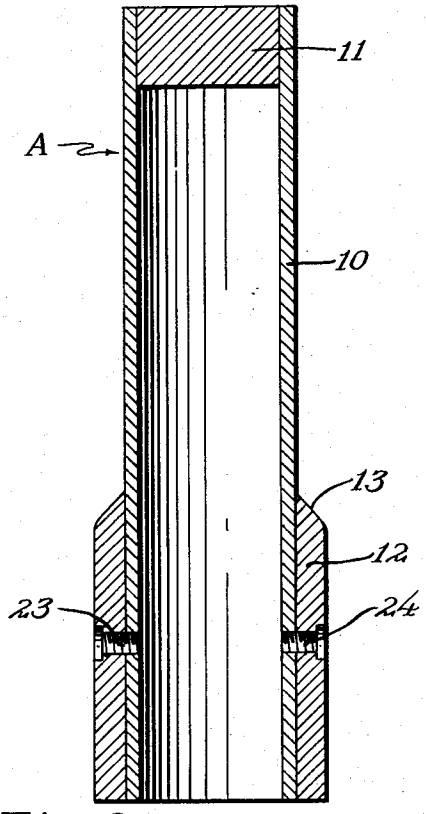


Fig. 2

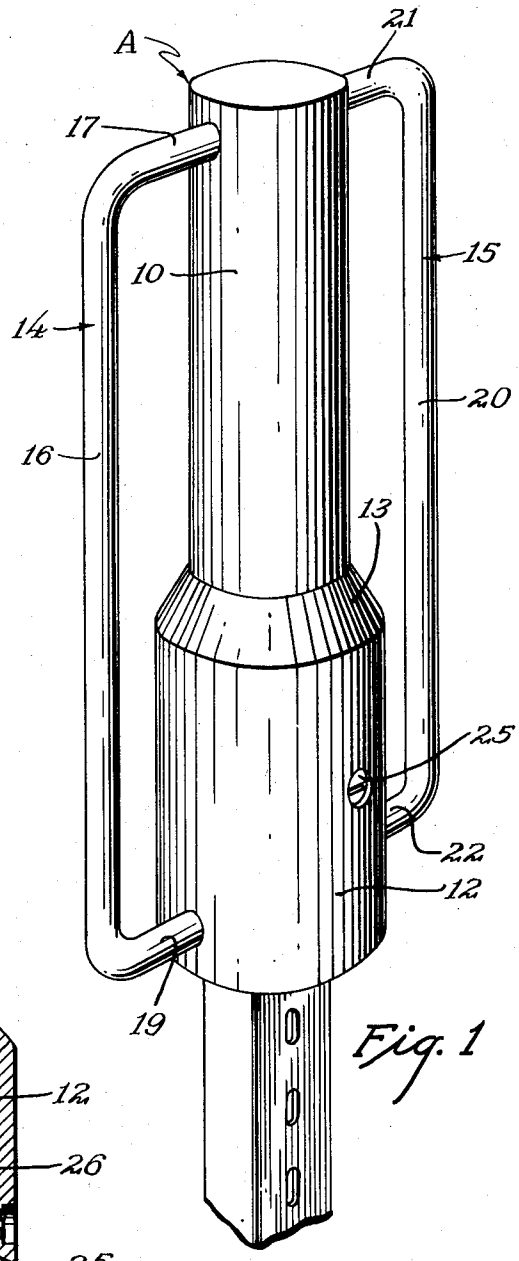


Fig. 1

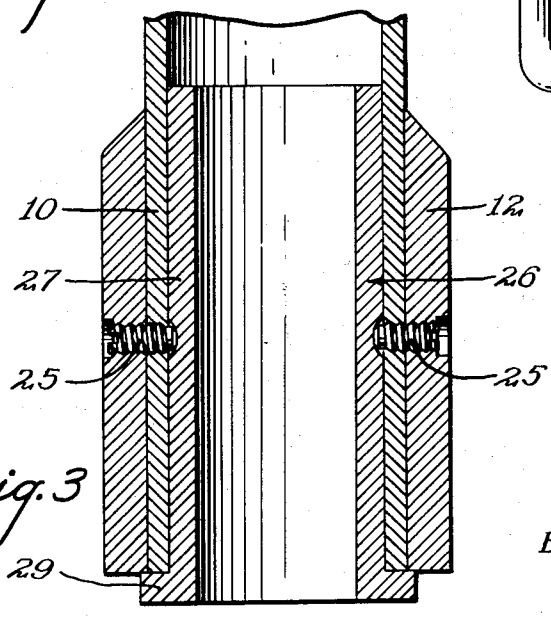


Fig. 3

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POST DRIVING DEVICE

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3 Claims. (Cl. 61—73)

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This invention relates to an improvement in post driving device and deals particularly with an apparatus useful in forcing fence posts and the like into the ground.

In recent years, it has become commoplace to employ a single strand fence for enclosing a herd of cattle and to electrify the fence so that the animals will not contact the fence. With such an arrangement it is simple to change the location of the fence from time to time. The present device is designed to simplify the task of driving the fence posts into the ground.

Various fence post driving devices designed to fit over a fence post have been previously produced, but these devices have certain definite disadvantages. In the first place the devices are usually heaviest at their upper end and as a result are top heavy. If the driving device is elevated above the top of the fence post, there is a considerable tendency for the driver to tilt out of the hands of the operator, causing the likelihood of injury. This difficulty is accentuated by the fact that usually devices of this type are not provided with handles, by means of which they may be easily manipulated.

An object of the present invention resides in the provision of a post driver which is weighted at its lower end and which accordingly is not top heavy. As a result if the device is elevated above the top of the post, the tendency for the driver to tilt or twist out of the hands of the operator is largely eliminated.

An added feature of the present invention lies in the provision of a fence post driving device having a pair of opposed handles by means of which the structure may be easily handled. These handles extend longitudinally of the device so that the handles may slide somewhat through the hands in lowered position of the driver.

These and other objects and novel features of our invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of the specification:

Figure 1 is a perspective view of the post driving device in readiness for operation.

Figure 2 is a sectional view through the device showing the construction thereof.

Figure 3 is a view similar to Figure 2 showing a bushing inserted within the driver for use with smaller sizes of posts.

The fence post driving device is indicated in general by the letter A. This device includes an elongated tubular body 10 having a plug 11 in the

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upper end thereof. This plug 11 is preferably welded in place so as to be integral with the tubular wall 10 and so that it can not come out of place in use.

A sleeve 12 encircles the lower end of the tubular member 10 and is integrally secured thereto. The upper extremity 13 of the sleeve 10 is preferably tapered so that the hands will slide easily over this portion of the sleeve. The sleeve 12 is of greater weight than the plug 11 so that the center of gravity of the entire device is low. Preferably, the center of gravity is below the upper extremity of the sleeve 13 and the size of the sleeve is properly determined to locate the center of gravity at substantially this point.

A pair of handles 14 and 15 are provided on opposite sides of the tubular member. The handle 14 includes an elongated central portion 16 and an inwardly directed end 17 welded or otherwise affixed to the sleeve 10 near the upper extremity thereof. The handle 14 is provided with a similarly inwardly directed end 19 which is welded or otherwise anchored to the sleeve 12. The handle 15 is similar to the handle 14 and in opposed relation thereto. This handle 15 includes an elongated central portion 20 and an inwardly directed upper end 21 which is welded or otherwise secured to the sleeve 10 in alignment with the end 17 of the handle 14. The lower end of the handle 15 is provided with an inwardly directed end 22 which is secured to the sleeve 12 in alignment with the end 19 of the handle 14. When the handles are grasped in the hands, the center of gravity is preferably below the point where the handles are normally engaged. As a result the structure has a tendency to remain upright when held.

As indicated in Figures 2 and 3 of the drawings, a pair of aligned threaded apertures 23 and 24 are provided which extend through the sleeve 12 and the tubular member 10. These threaded apertures are designed to accommodate set screws such as 25. When the post driver is being used for posts of relatively small size, one or more inserts such as 26 may be inserted into the tubular member 10 from the open lower end thereof. Each insert 26 comprises an elongated sleeve 27 of proper outer diameter to fit snugly within the tubular member 10. A circumferential flange 29 is provided at the lower end of the sleeve so as to engage against the undersurface of the tubular member 10 when the insert is in position. When the insert 26 is in place the effective diameter of the tubular member 10 is decreased so as to provide a snugger fit with the post being

driven. In preferred form the guide **26** extends only through the lower portion of the tubular member **10** and as a result the insertion of this sleeve does not tend to raise the center of gravity of the device as a whole.

In operation the post driver is placed over the top of the post to be driven and the handles **14** and **15** are engaged in the hands. The driver is lifted a short distance, the distance being preferably less than the depth of the bore within the tubular member **10** so that the post remains engaged in the lower end of this tubular member. The device is then pushed downwardly or permitted to drop, the hands remaining engaged with the handles. The handles may if desired be loosely held so that the shock caused by the plug **11** striking the upper end of the post is not transmitted to the hands. The elongated shape of the handles **14** and **15** permits such action to take place. By repeating this procedure the post may be driven to the proper depth in the ground.

In accordance with the patent statutes, we have described the principles of construction and operation of our post driver, and while we have endeavored to set forth the best embodiment thereof, we desire to have it understood that this is only illustrative thereof and that obvious changes may be made within the scope of the following claims without departing from the spirit of the invention.

We claim:

1. A post driver including an elongated tubular body having a closed upper end, and an open lower end, the closed upper end forming a post driving portion when the tubular body is telescoped onto the upper end of the post, the lower end of the tubular body having a peripherally extending weight thereupon, the weight being heavier than the closed upper end of the tubular body to locate the center of gravity of the driver closer to the lower end of the device than to the upper end thereof, the major portion of the weight thus being nearer the open end of the driver than to the post driving portion thereof.

2. The structure described in claim 1 and including an insert engageable in the tubular body to decrease the internal diameter thereof.

3. The structure described in claim 1 and including an insert comprising a tubular sleeve having an outer diameter to snugly fit within the tubular member of said body and having a peripheral flange at its lower end engageable with the lower end of said tubular body.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
2,086,213	Collord	July 6, 1937
2,098,146	Hunt	Nov. 2, 1937
2,225,765	Brice	Dec. 24, 1940