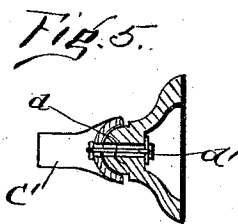
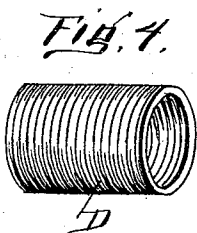
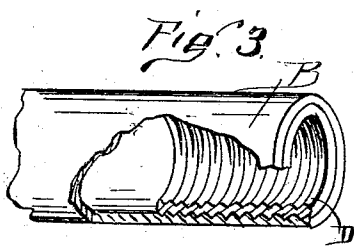
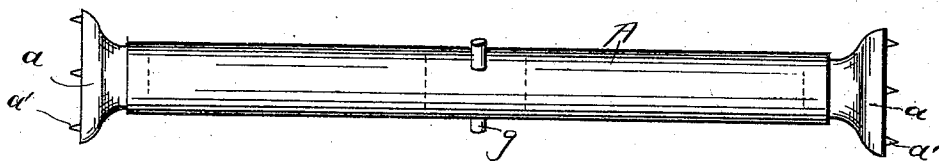
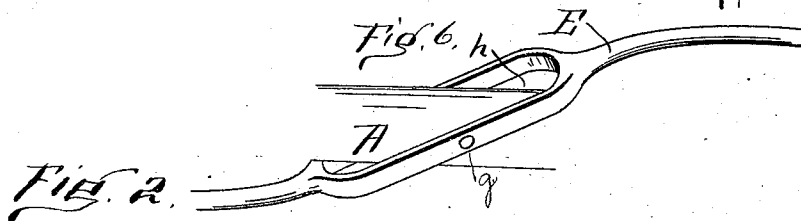
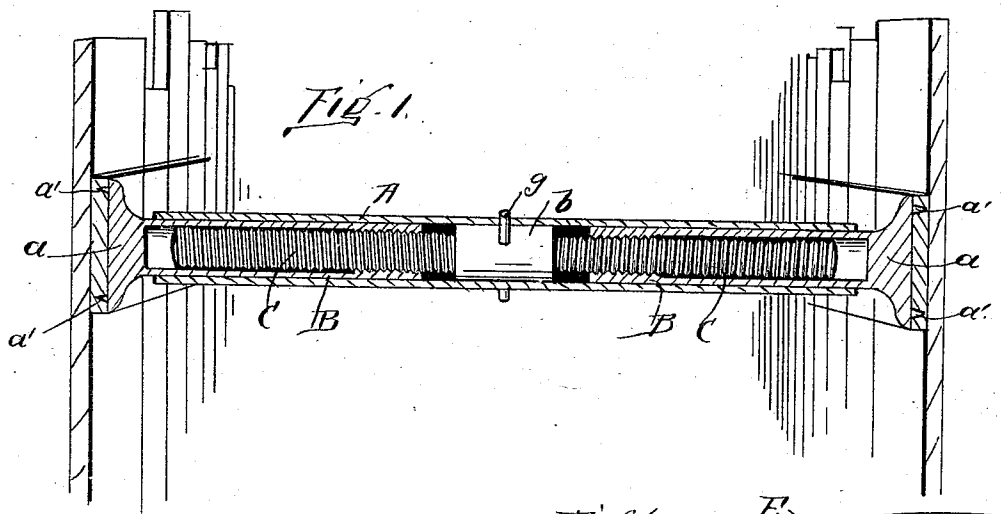


(No Model.)

W. MURPHY.
DITCHING JACK.

No. 551,990.

Patented Dec. 24, 1895.



WITNESSES:
J. J. Ross,
Bertha V. Finch.

INVENTOR,
William Murphy
By Fred W. Bond
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM MURPHY, OF ALLIANCE, OHIO.

DITCHING-JACK.

SPECIFICATION forming part of Letters Patent No. 551,990, dated December 24, 1895.

Application filed October 8, 1895. Serial No. 564,995. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MURPHY, a citizen of the United States, residing at Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Ditching-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a longitudinal section of the jack, showing the same properly placed to brace the side of a ditch. Fig. 2 is a view of the jack. Fig. 3 is a view showing the inner end of one of the screw-threaded sections, showing the same enlarged. Fig. 4 is a detached view of the bushing or thimble. Fig. 5 is a modification of one of the jack-heads, showing a section of the head. Fig. 6 is a view showing a portion of the shell or cylinder and illustrating the handle attached thereto.

The present invention has relation to ditching-jacks; and it consists in the different parts and combination of parts hereinafter described and particularly pointed out in the claims.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the outer shell or cylinder, which is formed of a length to correspond substantially with the length of the jack when the same is closed, and is formed of sufficient weight to give the jack proper the desired amount of strength.

Within the shell or cylinder A are located the hollow sections B, the inner ends or portions of which are screw-threaded for the purpose of receiving the screw-threads upon the right and left hand screw-threaded shaft C. To the outer ends of the sections B are connected in any convenient and well-known manner the heads *a*, which heads are provided with the points *a'*, said points being for the purpose of preventing the heads from slipping. The central portion of the right and left hand screw-thread C is provided with an enlarged portion *b*, which is of a diameter to correspond substantially with the inner diameter of the shell or casing A. It will be

understood that as the screw-threaded shaft C is rotated in one direction the sections B will be moved away from each other, and as said shaft is rotated in the opposite direction said sections will be drawn toward each other, thereby expanding and contracting the jack proper. For the purpose of providing a bushing for the inner ends of the sections B, they are provided with the screw-threaded thimbles D, which screw-threaded thimbles are located, when placed in proper position, substantially as shown in Fig. 3. It will be understood that by providing the thimbles D, new ones can be substituted as they become worn from use without the necessity of providing an entirely new section.

In Fig. 5 I have illustrated a slight modification, which consists in swiveling a head to the section or sections B. The swiveled head *d* may be substantially of the form shown, and is held to the section *c'* by means of the connecting-bolt *d'*.

For the purpose of providing a means for rotating the right and left hand screw-threaded shaft C, the cross-pin or rivet *g* is provided, which pin is extended through the shell or cylinder A, and is so extended for the purpose of pivotally attaching the handle E, which handle is formed of sufficient length to give the desired amount of leverage. The handle E is provided with the elongated opening or slot *h*, through which opening the shell together with the right and left screw-threaded shaft is passed. It will be understood that by providing the elongated opening *h* the handle E can be turned so as to bring said handle out of right angles to the cylinder A.

The object and purpose of providing the handle E is to provide a means for reducing the bulk of the jack proper and at the same time bring the said handle out of the way while the jack is in use.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the cylinder A, the hollow sections B, screw-threaded upon their inner ends or portions and located within the cylinder A, the right and left hand screw-threaded shaft provided with the enlarged portion *b*, and located within the sections B and the cylinder A, the heads *a*, provided

with the points a' , and the pivoted handle E, substantially as and for the purpose specified.

2. The combination of the cylinder A, having located therein the right and left hand
5 screw-threaded shaft C, and the sections B provided with the heads a , the pin or rivet g , extended through the cylinder A, and the shaft C, the handle E, pivotally attached to the pin or rivet g , and the bushing or thim-
10 ble D, located upon the inner ends of the sec-

tions B, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM MURPHY.

Witnesses:

F. W. BOND,
J. A. JEFFERS.