

No. 881,736.

PATENTED MAR. 10, 1908.

L. & E. L. STEPHENS.

ROPE GRAB.

APPLICATION FILED DEC. 9, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

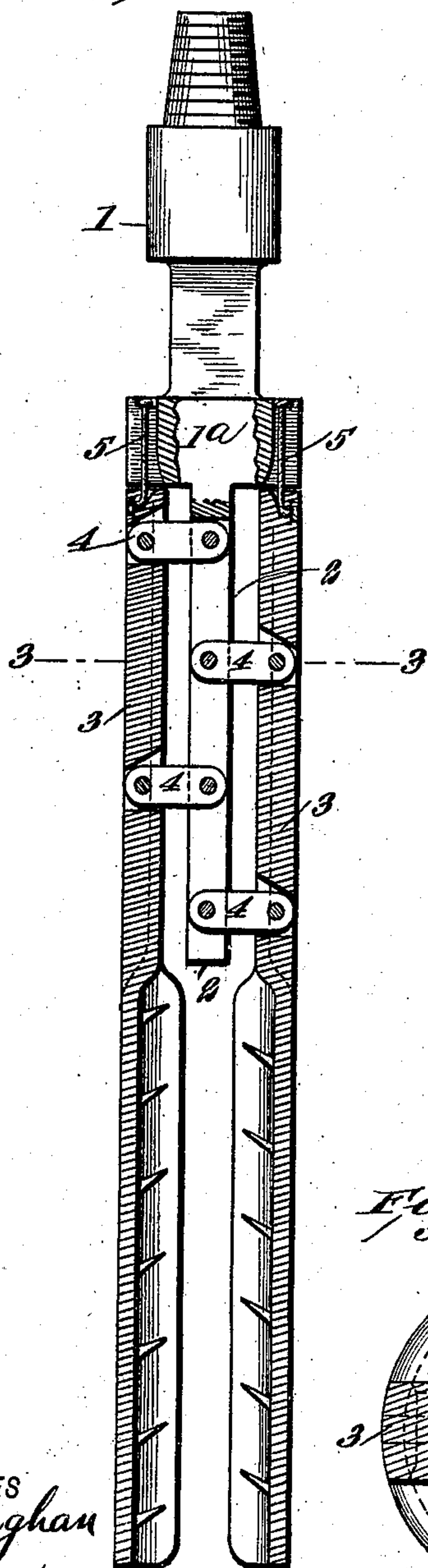


Fig. 2.

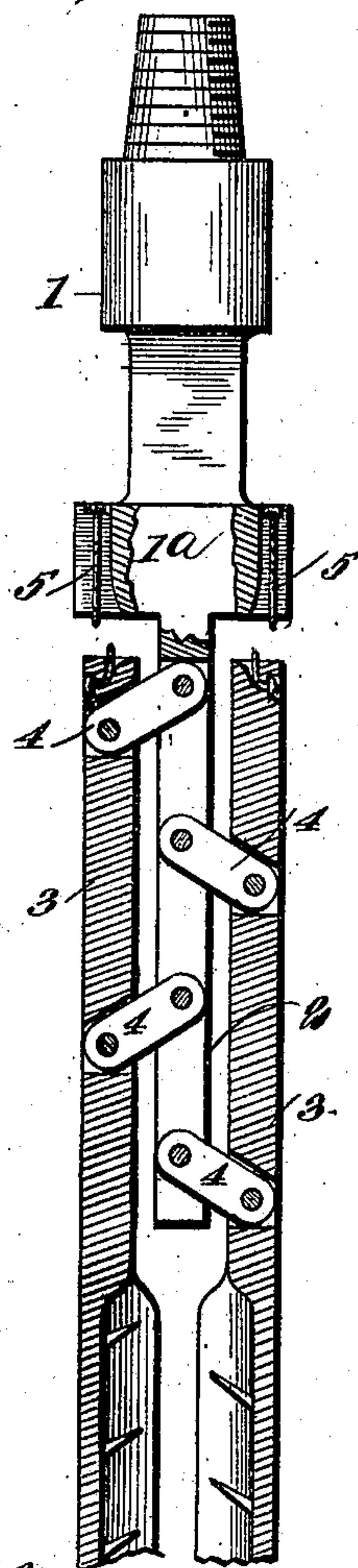
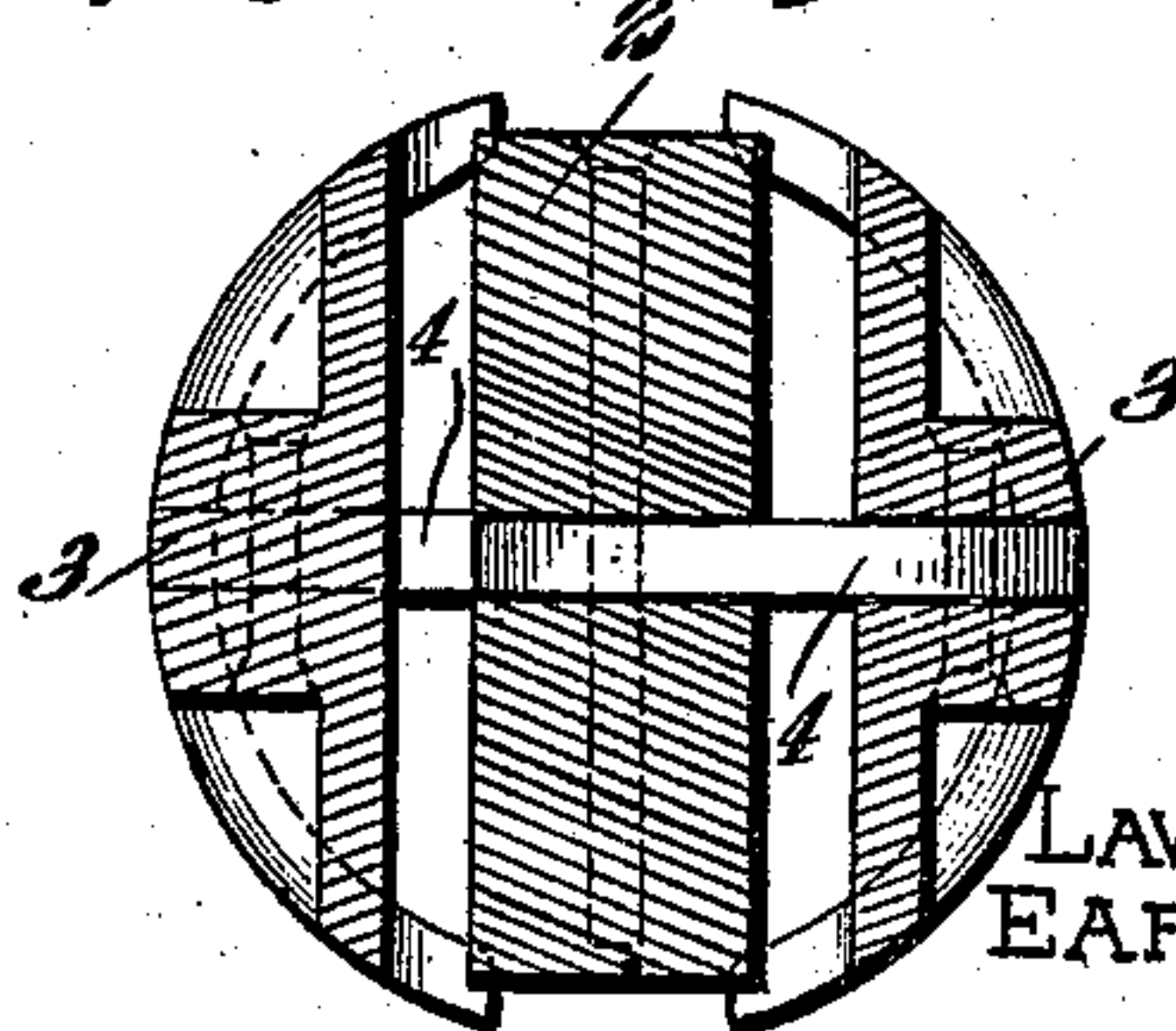


Fig. 3.



WITNESSES
E. M. Callaghan
Anne W. Hart

INVENTORS
LAWRENCE STEPHENS
EARL L. STEPHENS
BY *Munn & Co.*
ATTORNEYS

No. 881,736.

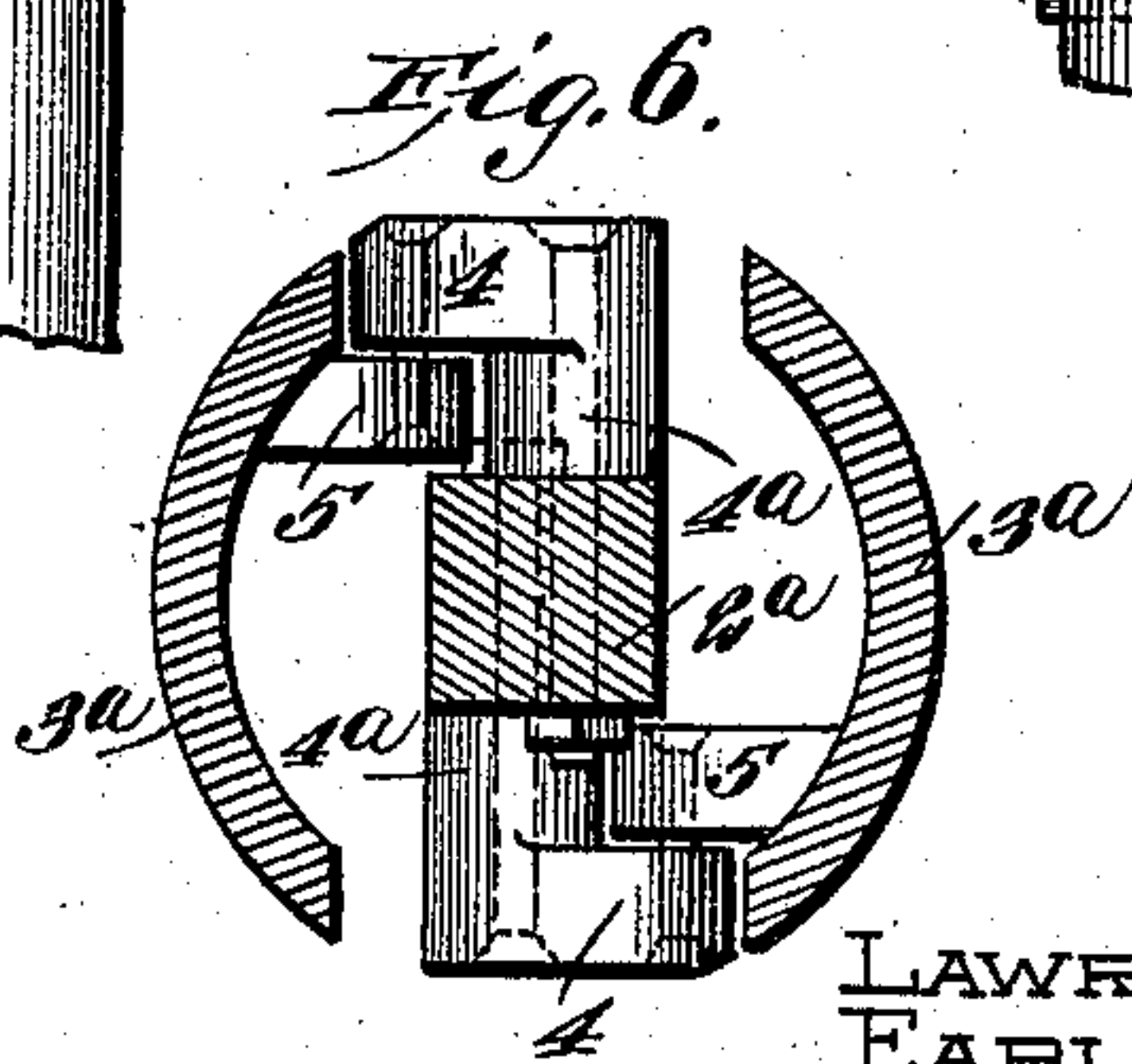
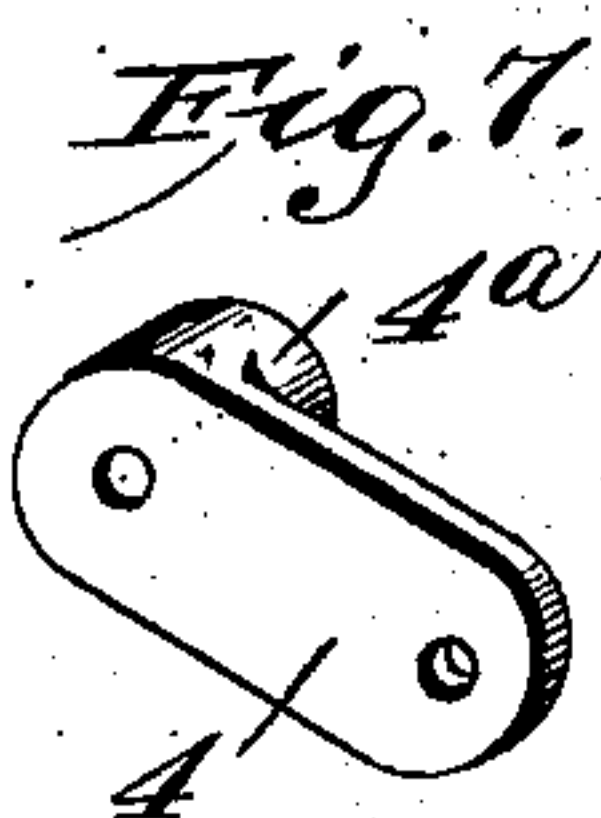
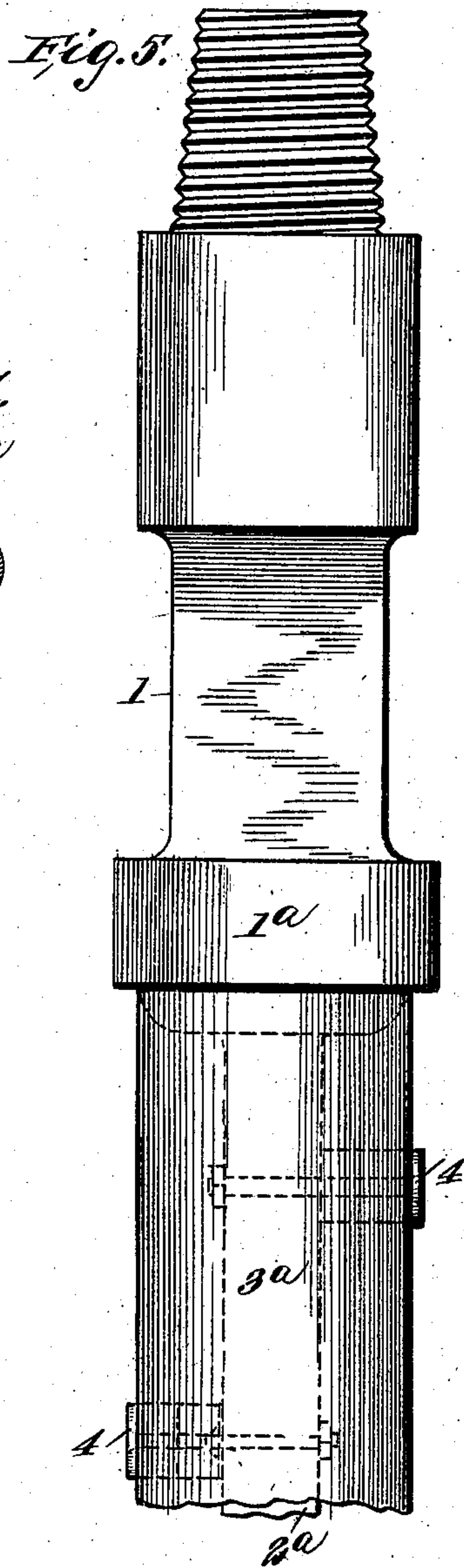
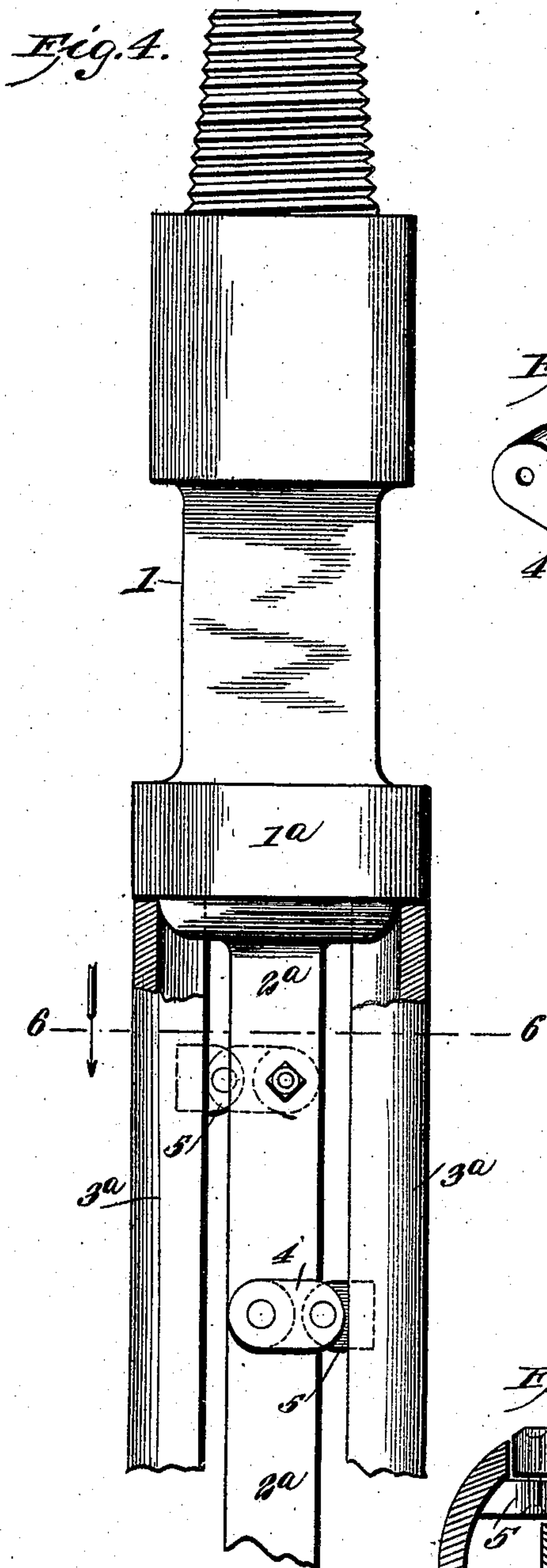
PATENTED MAR. 10, 1908.

L. & E. L. STEPHENS.

ROPE GRAB.

APPLICATION FILED DEC. 9, 1907.

2 SHEETS—SHEET 2.



WITNESSES
C. M. Callaghan
Amos W. Hart

INVENTORS
LAWRENCE STEPHENS
EARL L. STEPHENS
BY *Munn & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

LAWRENCE STEPHENS AND EARL LAWRENCE STEPHENS, OF MACKSBURG, OHIO.

ROPE-GRAB.

No. 881,736.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed December 9, 1907. Serial No. 405,796.

To all whom it may concern:

Be it known that we, LAWRENCE STEPHENS and EARL LAWRENCE STEPHENS, citizens of the United States, and residents of Macksburg, in the county of Washington, State of Ohio, have invented certain new and useful Improvements in Rope-Grabs, of which the following is a specification.

Our invention is an improvement in tools and devices employed for fishing out and recovering ropes lost in oil wells.

It is more particularly an improvement upon a rope-grab for which L. Stephens received Letters Patent of the United States, No. 846,157, dated March 5, 1907.

In the former invention, two toothed jaws are employed for seizing and holding the rope, one of the jaws being integral with the head of the tool, while the other is free or disconnected, and pivotally attached to the fixed jaw by means of links. In the present invention, both jaws are free or disconnected from the head of the tool and are pivotally attached to the central stem which is pendent from the head of the tool.

The details of construction, arrangement, and combination of parts constituting my improved tool are as hereinafter described and illustrated in the accompanying drawings, in which

Figure 1 is in part a side view and in part a longitudinal section of our improved tool, the toothed jaws being shown in elevated or raised position and separated from each other to the fullest extent. Fig. 2 is a similar view, save that the jaws are moved downward and approach each other in the position required for seizing and holding the rope. Fig. 3 is an enlarged cross section on the line 3—3 of Fig. 1. Fig. 4 is a side view of the upper part of a modified form of the invention—portions being broken away to show the interior form. Fig. 5 is another side view of the same. Fig. 6 is a cross section on the line 6—6 of Fig. 4. Fig. 7 is a perspective view of one of the links employed in the modified form of the invention.

The form of the invention shown in Figs. 1, 2, and 3, will be first described. 1 indicates the head of the tool, which is provided with a tapered screw-threaded portion to adapt it to be secured to a rod by which it is operated. The base 1^a of the head is cylindrical and enlarged, and from it depends centrally a bar or stem 2. The toothed jaws 3—3 are arranged at opposite sides of the stem 2 and

connected therewith by links 4, which are pivoted at each end in slots formed in the stem and jaws respectively, as shown. The slot in the stem extends practically its entire length and those in the jaws are inclined on the upper side in order to permit the links to assume the inclined position shown in Fig. 2, which is required to enable the jaws to close upon and hold the rope. When the jaws are in raised or elevated position as shown in Fig. 1, their upper ends abut the base 1^a of the head, and they are detachably connected to the head by means of a small easily breakable cord 5, which is passed through bores formed in the head and the adjacent ends of the jaws. In Fig. 1, the cords are shown applied so as to hold the jaws in an elevated position, and in Fig. 2, the jaws are descended and the cords are broken. This device is the same as was used in the former invention of L. Stevens, before referred to. In the wide open position, shown in Fig. 1, the jaws are far enough apart to enable them to pass over or slide down upon the rope end, and, upon raising the tool the jaws drop and move toward each other as shown in Fig. 2, thereby seizing and holding the rope securely. In Fig. 3 we illustrate the arrangement of the pivots by which the links are attached to the jaws, the latter being provided with recesses, or cut-out portions, which permit convenient insertion of the points, as will be readily understood.

In the modified form of the invention, shown in Fig. 4—7, the head 1 and its base 1^a of the tool are constructed the same as shown in Figs. 1 and 2. The pendent stem 2^a and the jaws 3^a have also the same general form or construction. The attachment of the jaws to the stem is, however, effected by different means, that is to say, by links 4 which have at one end an offset 4^a, as shown in Figs. 6 and 7. The offset portion, or thickened end, of the links is pivoted to the stem 2^a, while the other portion is pivoted to lugs 5 formed integrally with the shanks of the jaws 3^a and located eccentrically, that is to say, at one side of the longitudinal center of the jaws. Thus, no slots are formed in the stem 2^a, nor in the jaws 3^a, the attachment being effected entirely by arranging the links 4 and the lugs 5 laterally with relation to the same.

What we claim is:

1. The improved rope-grab, comprising a head, an alined stem dependent therefrom, two toothed jaws arranged on opposite sides

of the same, and links which pivotally connect the jaws with the stem whereby the jaws are adapted for vertical movement as required for engagement with, and disengagement from, the rope, as shown and described.

2. The improved rope-grab, comprising a head having an aligned central stem which is dependent therefrom and provided with 10 slots, toothed jaws arranged on opposite

sides of said stem and also provided with slots, and links pivoted at their ends in the respective slots of the stem and jaws, in the manner shown and described.

LAWRENCE STEPHENS.

EARL LAWRENCE STEPHENS.

Witnesses:

NETTIE STEPHENS,

O. S. GILCHRIEST,

SUSIE KING.