

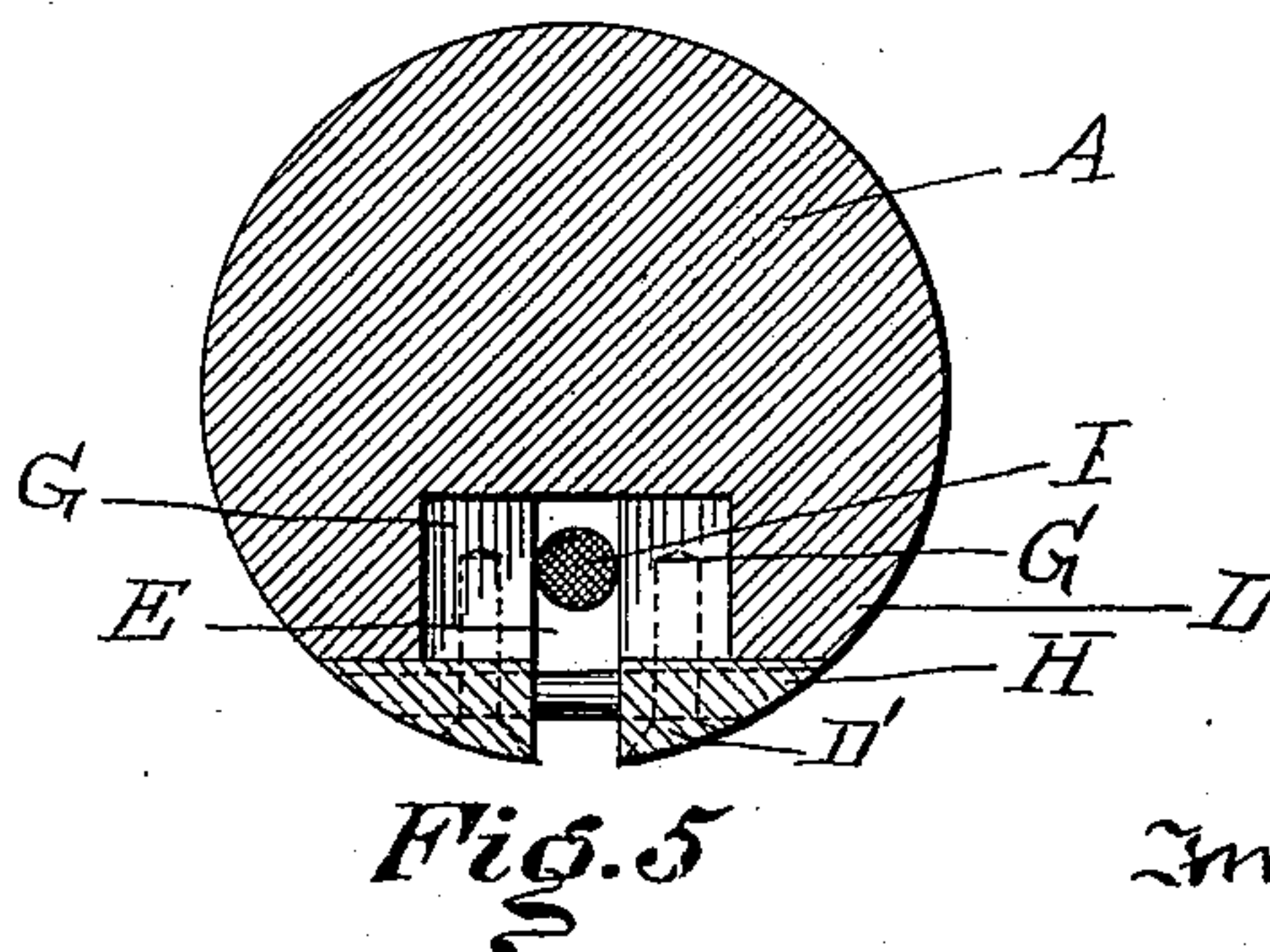
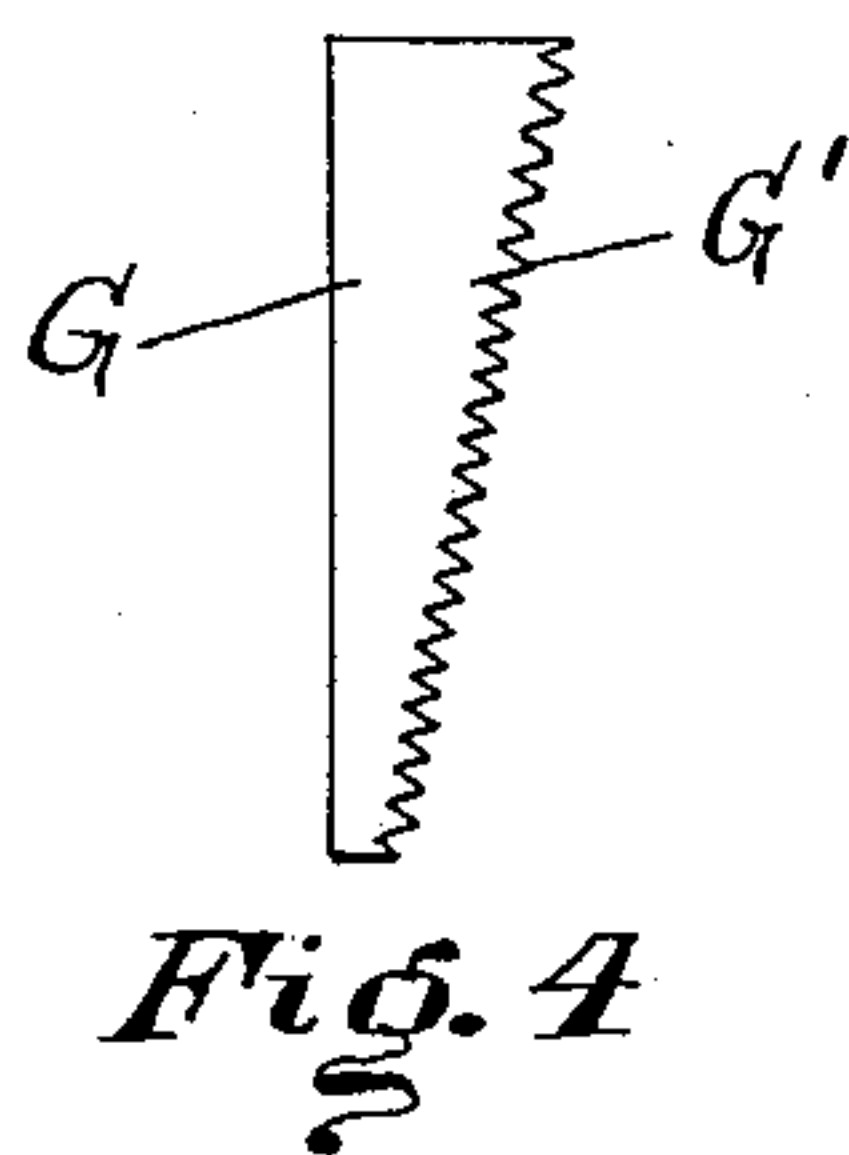
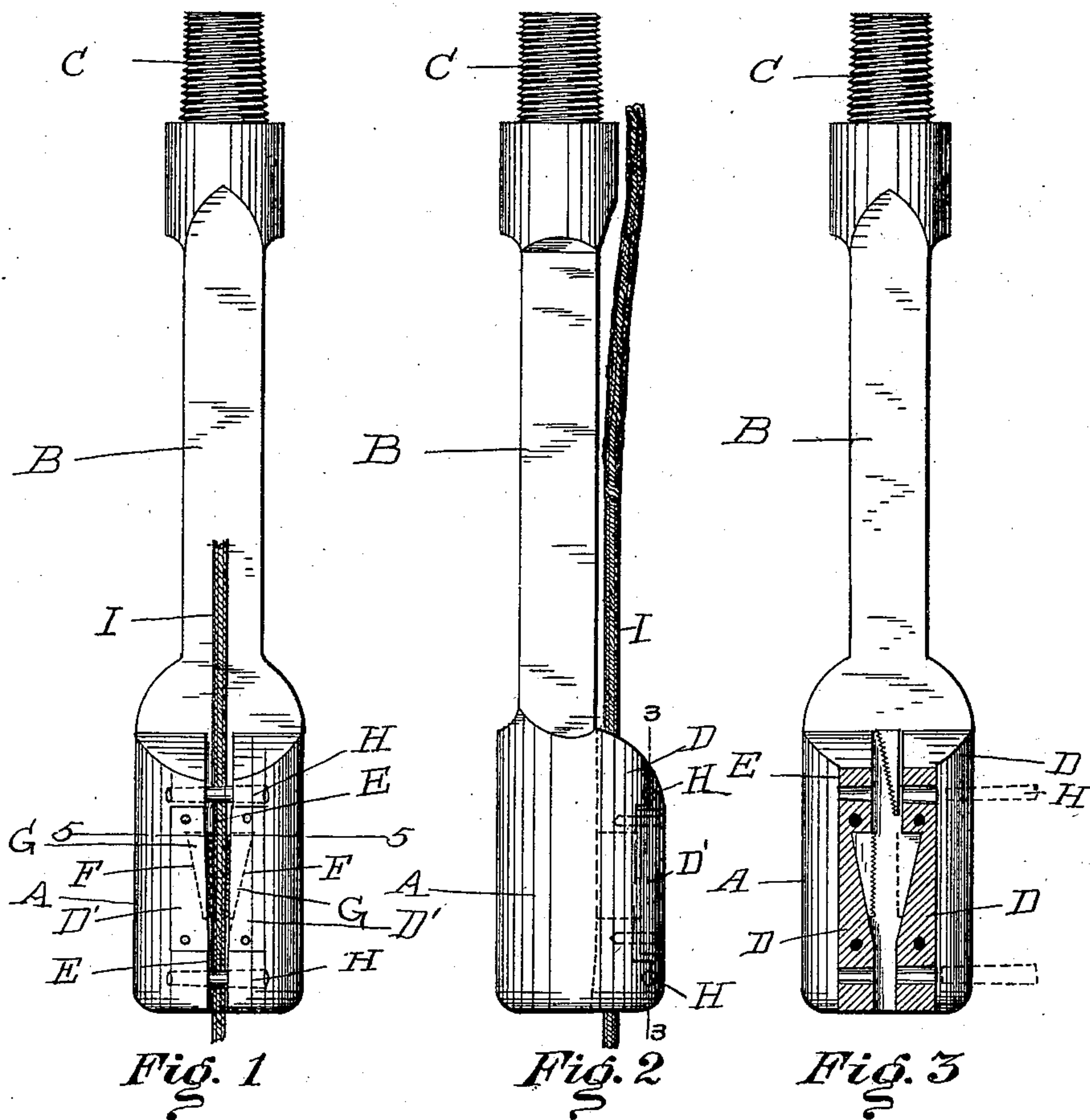
No. 621,132.

Patented Mar. 14, 1899.

C. PHILLIPS.
FISHING TOOL.

(Application filed Oct. 18, 1898.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES PHILLIPS, OF MANNINGTON, WEST VIRGINIA.

FISHING-TOOL.

SPECIFICATION forming part of Letters Patent No. 621,132, dated March 14, 1899.

Application filed October 18, 1898. Serial No. 693,847. (No model.)

To all whom it may concern:

Be it known that I, CHARLES PHILLIPS, a citizen of the United States, residing at Mannington, in the county of Marion and State of West Virginia, have invented new and useful Improvements in Fishing-Tools, of which the following is a specification.

This invention relates to fishing-tools for use in oil and other wells, and has particular reference to a simple, improved, and effective device for loosening the bailer when fast in the well-bore and which in the event of failure to loosen same is adapted to sever the sand-line close to the bailer, so that the entire length thereof may be removed without injury, leaving the bore above the obstruction entirely open for the insertion and operation of more powerful obstruction-removing devices. Ordinarily when the bailer sticks fast the sand-line is subjected to strain, sufficient often to part it, the section below the break dropping back onto the bailer, increasing the difficulty of removing the obstruction and also resulting in waste of line. My improved device obviates these difficulties, for as soon as the bailer sticks fast pull upon the sand-line is stopped and the improved fishing-tool is secured to the string of drilling-tools and lowered into the well, and if the bailer cannot be jarred or pulled loose the line is severed and its entire length removed and preserved intact.

The invention consists in the novel features of construction and in the combination and arrangement of parts hereinafter fully described and claimed and illustrated by the accompanying drawings, in which—

Figure 1 is a front elevation of the tool in position on a sand-line. Fig. 2 is a side view. Fig. 3 is a vertical section on line 3 3 of Fig. 2. Fig. 4 is a detail of one of the slips. Fig. 5 is a cross-section on line 5 5 of Fig. 1.

The body A of the tool is squared at B to form a wrench-hold when attaching same at pin C to the drill-jars. The tool has enlargement D on one side of its lower portion, and the enlargement-face is formed with vertical incision E. In the walls of this incision are formed the downwardly-tapering recesses F. G are wedge-shaped slips corrugated on their adjacent faces at G', which operate in said

recesses to grip the sand-line I, as will be presently described.

The slips are inserted in the recesses by being passed down through the upper end of incision E, while the portion of the incision below the recesses is contracted sufficiently to prevent the slips from dropping through. Recesses F are closed by plates D', removably secured to the face of enlargement D.

H are pins bridging incision E, which are adapted to be removed when inserting the sand-line I and are then repositioned and hold the tool loosely on the line with the latter between slips G.

The operation is as follows: When the bailer is found to be fast, the fishing-tool is wrenched to the lower end of the string of drilling-tools and is then loosely secured on the sand-line, as above described, so as to follow the same when lowered into the bore. The tool thus follows the line to the bailer, and the string of tools, together with the fishing-tool, are operated as a jar to loosen the same. If this proves ineffectual, the drilling-cable is drawn upon, lifting the tools and causing the slips G to clutch the sand-line close to the bailer. With the drilling-cable pulling steadily the bailer is frequently dislodged, but if stuck too fast the continued strain causes the slips to bite the line and eventually sever the same at the point of engagement. The slips and their recesses F are of such form as to increase the hold on the line with increased pull on the drilling-cable, as will be readily understood. The entire line above the fishing-tool is preserved from strain, and if of necessity it is severed it is removed and its further usefulness unimpaired. With the line thus out of the way and the tools removed the bore is clear for the insertion of other appliances for effecting the removal of the bailer.

I do not desire to limit myself to the exact details of construction here shown, as the same may be varied in many particulars without departing from the spirit of my invention.

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

1. An improved fishing-tool for operating on sand-lines comprising a body having a top

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coupling and a vertical incision in one side, the incision-walls having opposite wedge-shaped recesses F, short slips G entirely within the recesses and serrated on their adjacent faces to operate on the sand-line as described, the slips being freely movable in the recesses, substantially as set forth and shown.

2. An improved fishing-tool for operating on sand-lines comprising a body portion having a top coupling and a vertical incision in one side, the incision-walls having opposite downwardly-tapering wedge-shaped recesses F formed therein, short slips G entirely within the recesses and operative on the sand-line in the manner described, the portion of the vertical incision above recesses F being larger than the portion below the recesses for the admission of the slips and retention thereof, and removable pins H bridging the incision outside of recesses F and slips G for retaining the tool on the sand-line, substantially as shown and described.

3. An improved fishing-tool, comprising a body portion having a vertical lineway open on one side from end to end, line-gripping devices on opposite sides of the way for engaging the line when moving upward thereon, and keepers for loosely holding the line in the way and between the gripping devices, substantially as shown and described.

4. An improved fishing-tool having its body portion provided with a vertical sand-line

way open on one side, line-gripping means, and removable line-retaining pins bridging the lineway, substantially as shown and described.

5. An improved fishing-tool, comprising a body portion formed with a vertical incision, the opposite faces of the incision having downwardly-tapering recesses, wedge-shaped slips entirely within and operative in the recesses and serrated on their adjacent faces to grip opposite sides of the sand-line, and means for retaining the line between the slips, substantially as shown and described.

6. An improved fishing-tool, comprising a body portion formed with a vertical incision, the downwardly-tapering recesses being formed in opposite faces of the incision, the portion of the incision beneath the recesses being contracted for the purpose described, the slips operative in the recesses and adapted to be positioned therein by being passed downward through the upper end of the vertical incision, and means for retaining the tool on the sand-line, substantially as shown and described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES PHILLIPS.

Witnesses:

CHARLES E. JOLLIFFE,
JOSEPH A. JOLLIFFE.