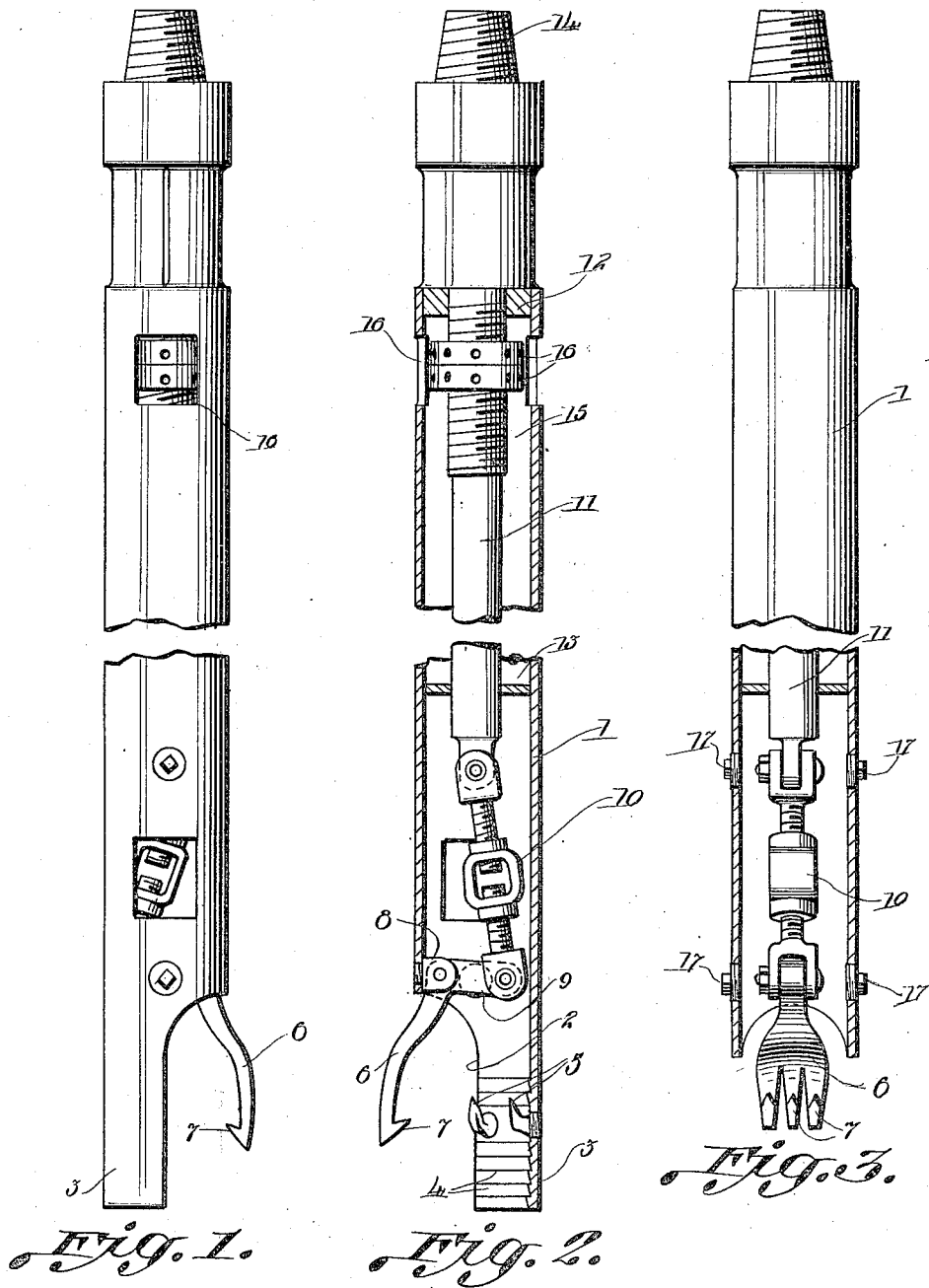


A. B. HEATON.
FISHING TOOL.
APPLICATION FILED OCT. 28, 1918.

1,295,492.

Patented Feb. 25, 1919.



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ALEXANDER BENJAMAN HEATON, OF CASPER, WYOMING.

FISHING-TOOL.

1,295,492.

Specification of Letters Patent.

Patented Feb. 25, 1919.

Application filed October 28, 1918. Serial No. 260,025.

To all whom it may concern:

Be it known that I, ALEXANDER BENJAMAN HEATON, a citizen of the United States, and a resident of Casper, in the county of Natrona and State of Wyoming, have invented certain new and useful Improvements in Fishing-Tools, of which the following is a specification.

My invention is an improvement in fishing tools, and has for its object to provide a tool of the character specified, especially designed for insertion in a well casing to recover lost and broken tools, wherein mechanism is provided for firmly grasping the tool to be removed prior to the removal of the tool and operable from the top of the well casing.

In the drawings:

Figure 1 is a side view of the improved tool;

Fig. 2 is a longitudinal section;

Fig. 3 is a section at right angles to Fig. 2.

In the present embodiment of the invention a suitable casing 1 is provided, of cylindrical form, having its lower end cut away as indicated at 2 for a suitable distance over about half the diameter of the casing, forming thus a transversely curved gripping jaw 3 which is adapted to slip behind the upper end of the tool as it leans against the casing to cause the said upper end of the tool to pass upwardly in the direction of the bore of the casing 1.

The inner surface of this jaw 3 is provided with upwardly facing shoulders or corrugations 4 for assisting the grip of the jaw on the tool, and teeth 5 may be connected with the jaw 3, each tooth having a threaded stem, as shown, which engages an opening in the casing. A movable jaw 6 in the form of a hook having a series of bills 7, three in the present instance, is pivoted between the arms of a yoke 8. This yoke has its body portion provided with a threaded stem which engages an opening in the wall of the casing 1, and the hook has an angular extension 9 at the opposite end from the bills, which is connected by a turn buckle 10 with a link 11 mounted to slide in the casing 1.

This turn buckle consists of a central double nut, which is connected to stirrups engaging the extension 9 of the hook and the link 11 by means of threaded rods, as

shown, the said rods being integral with the stirrups, and it will be obvious that when the link 11 is moved longitudinally of the casing 1 the hook 6, which is the movable jaw, will be moved toward and from the fixed jaw, the direction of movement depending upon the direction in which the link is moved.

The link 11 has its upper end passing through a collar or washer 12 rigid with the upper end of the casing 1 and its lower end passes through a guide 13 held in the casing. The upper end of the mandrel has a tapering threaded stem 14, by means of which the said mandrel may be connected with a suitable hoisting device. The mandrel also has an enlarged threaded portion 15 upon which are mounted nuts 16. These nuts have radial openings for engagement by a tool to turn the same and are adapted to engage the collar 12 when the mandrel moves above a predetermined point to take the strain and to lift the entire fishing tool and the captured tool. The casing 1 has openings or windows 16 in position such that they permit the engagement of a tool with the openings of the nuts, and the casing also has openings, normally closed by threaded plugs 17, in line with the pivotal connection between the turn buckle 10 and the mandrel 11, and approximately in line with the connection between the turn buckle and the extension 9 of the hook 6.

I claim:

A fishing tool comprising a tubular casing having its lower end cut away at one side to form a longitudinally extending transversely curved gripping jaw, a movable jaw pivoted to the casing at the opposite side from the fixed jaw and mounted to move toward and from the fixed jaw, a mandrel mounted to slide longitudinally of the casing, the movable jaw having a lateral extension at its pivotal connection and the mandrel being pivoted to the extension and adapted at its upper end for connection with hoisting apparatus, means for limiting the sliding movement of the mandrel, and an expansible and contractible connection between the mandrel and the extension.

ALEXANDER BENJAMAN HEATON.

Witnesses:

H. M. CAMPBELL,
P. E. MURPHY.