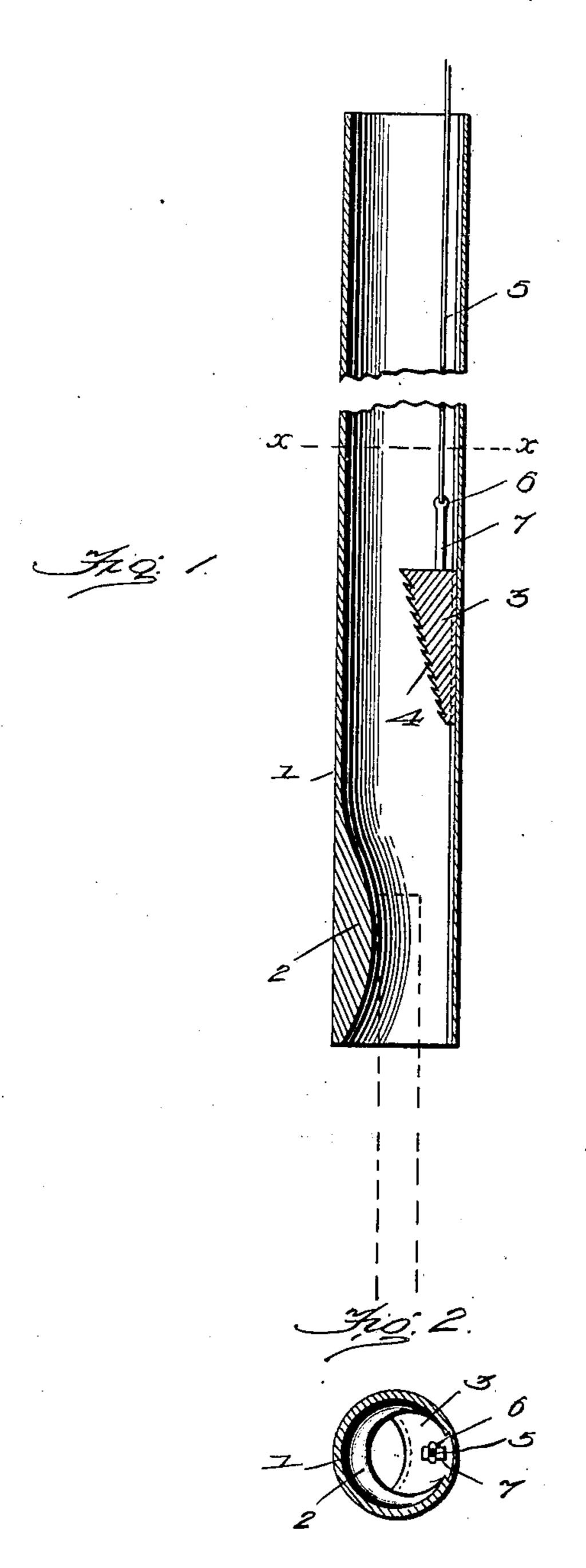
## J. G. HOLLINGSWORTH. GRAB TOOL.

APPLICATION FILED JAN. 29, 1908.



Witnesses (Sover)

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## UNITED STATES PATENT OFFICE.

JOHN G. HOLLINGSWORTH, OF LEBANON, SOUTH DAKOTA.

## GRAB-TOOL.

No. 885,478.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed January 29, 1908. Serial No. 413,253.

To all whom it may concern:

Be it known that I, John G. Hollingsworth, citizen of the United States, residing at Lebanon, in the county of Potter and State of South Dakota, have invented new and useful Improvements in Grab-Tools, of which the following is a specification.

My invention relates to that class of devices known as "grab" tools adapted for withdrawing broken drills, rods, etc. from drill holes.

The object of the invention is to provide a device of the character named which will be effective in operation, and may be manufactured at small cost.

The invention consists of a tube provided with a stationary clamping jaw, in combination with a coöperating movable jaw, adapted to be raised and lowered within the tube; and the construction of the improvement will be fully described hereinafter in connection with the accompanying drawing which forms part of this specification, and its novel features will be defined in the appended claims.

In the drawing:—Figure 1 is a central vertical section of a tool embodying the invention, and Fig. 2 is a transverse section of the same on the line 2—2 of Fig. 1.

of such diameter as will adapt it to be readily lowered into a drill hole formed on its inner surface and adjacent to its lower end with an enlargement 2 of substantially crescent shape, and extending only partly around the tube as shown in Fig. 2. This enlargement is convex or rounded in cross section and constitutes the fixed clamping jaw of the tool, and is adapted to coöperate with a movable jaw 3, which is approximately of crescent shape, and provided on its concave surface with upwardly projecting teeth 4.

The toothed surface of the jaw 3 is beveled or inclined to coact with the convex surface of the fixed jaw 2, and said jaw 3 is suspended within the tube 1 by means of a suitable wire 5, the lower end of which is secured to an eye 6 formed at the upper end of a rod 7 projecting from the upper end of the jaw 3.

The utility and operation of the tool con- 50 structed as thus described may be explained as follows:—When it becomes necessary to remove a broken drill, rod, or other implement from a drill hole, the "grab" or fishing tool is lowered into the drill hole, and the ob- 55 struction to be removed (illustrated by the dotted lines in Fig. 1) enters the lower end of the tube 1. The suspended toothed jaw is then manipulated by means of its suspending wire 5, until the upper end of the rod or other 60 implement to be withdrawn is firmly clamped between the fixed jaw 2, and the toothed movable jaw, after which the tube 1 is drawn up, bringing with it the article clamped therein.

A grab tool comprising a tube formed on its inner surface and adjacent to its lower end with an integral enlargement of substantially crescent shape, and rounded in cross section; 70 in combination with a movable jaw of concavo-convex form having its concave face inclined and formed with upwardly projecting teeth; and means for suspending said

In testimony whereof I affix my signature in presence of two witnesses.

JOHN G. HOLLINGSWORTH.

Witnesses:

. I claim:—

R. A. Jackson, Genevieve Jackson.

movable jaw within the tube.