

(No Model.)

W. H. WISHERD.  
DRILL ROD GRAB.

No. 526,358.

Patented Sept. 18, 1894.

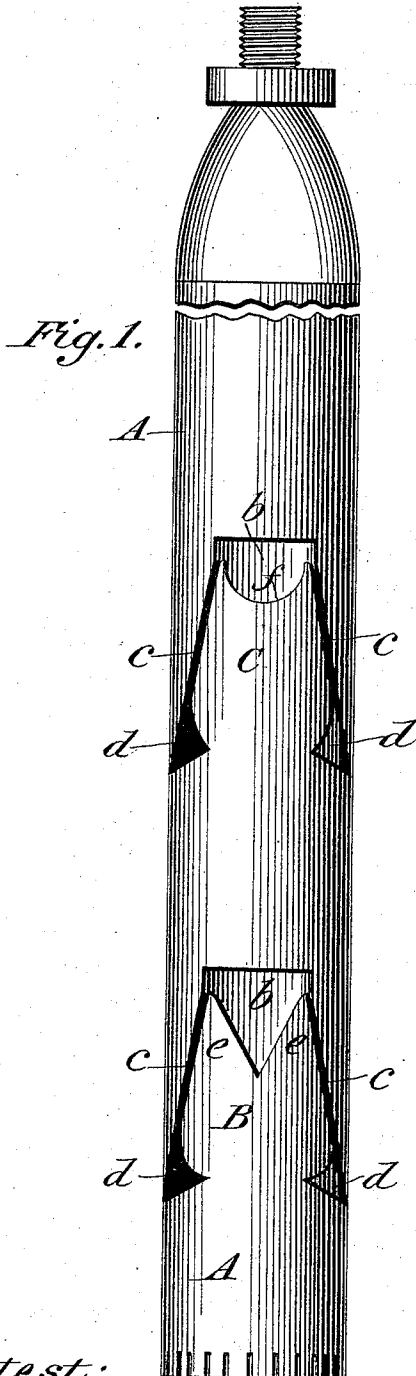


Fig. 1.

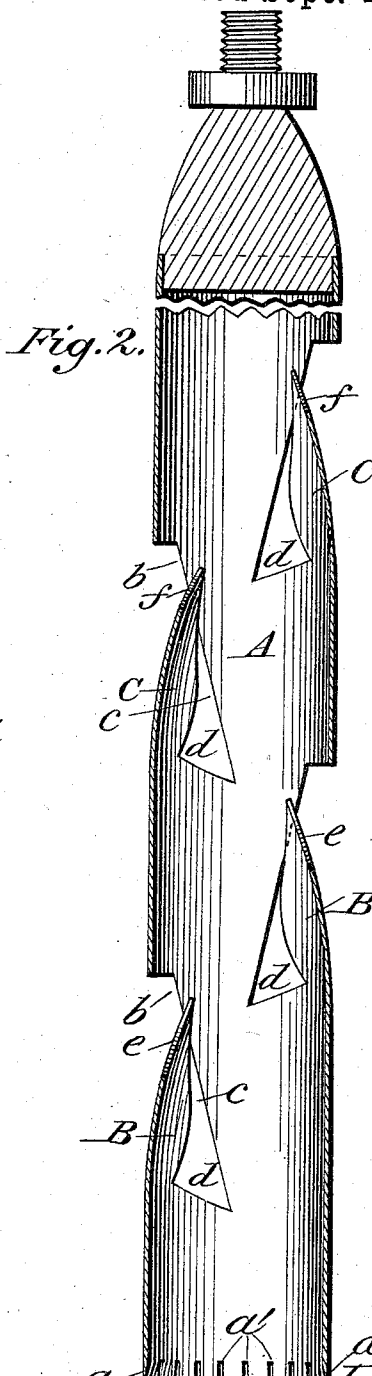


Fig. 2.

Attest:  
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# UNITED STATES PATENT OFFICE.

WILLIAM H. WISHERD, OF BIRD CITY, KANSAS.

## DRILL-ROD GRAB.

SPECIFICATION forming part of Letters Patent No. 526,358, dated September 18, 1894.

Application filed June 13, 1893. Serial No. 477,473. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. WISHERD, a citizen of the United States, residing at Bird City, in the county of Cheyenne and State of Kansas, have invented certain new and useful Improvements in Drill-Rod Grabs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in drill-rod grabs, and has for its object to provide a cheap and simple grab that will readily pass over the ends of broken rods in the well and firmly grasp them whereby they may be withdrawn, the grab being adapted for withdrawing either wooden or iron rods and also rods either with or without couplings.

To these ends my invention consists in the novel construction and combination of parts hereinafter fully described and finally specifically pointed out in the claim, due reference being had to the accompanying drawings forming a part of this specification, wherein—

Figure 1 is a side elevation of my improved device, and Fig. 2 a vertical section thereof.

Referring to the drawings the letter A indicates a metallic cylinder, preferably of steel, provided at its upper end with any suitable or well known means for attaching the usual rod for lowering the grab into the well. The cylinder or grab A at its lower end is beveled outwardly, at *a*, so as to facilitate the grab dropping easily over the end of the rod to be withdrawn. The grab is provided with inwardly projecting catches adapted to grasp the rod arranged opposite each other, as indicated at B, B, and C, C. Said catches are struck up from the cylinder A by cutting away suitable portions of the cylinder, as at *b* and *c*, and bending the free ends of said catches inwardly, as shown more clearly in Fig. 2. The metal is cut away about the bottom of the catches, as indicated at *d*, *d*, thus making the catches narrowest at this point, whereby greater elasticity is imparted thereto.

The upper ends of the catches B, B, are forked, as at *e*, *e*, and bent inwardly toward

each other, the construction being such that when the cylinder A is lowered down over the rod to be withdrawn the forked ends of the catches B, B, will embrace the rod upon opposite sides and firmly grasp the same, permitting the rod to be lifted out of the well with the grab. The catches C, C, are similar in all respects to the catches B, B, excepting that instead of being forked they are provided with semi-circular recesses *f*, *f*, at their upper ends which fit the opposite sides of the rods. This form of catch is especially designed for grasping iron rods, the catches B, B, being intended for use with wooden rods. The catches B, B, and C, C, are made of such length that it is impossible for them to be pulled downward or back upon the interior of the cylinder by the weight of the rod, or to cut the rod in two.

While I have shown only two sets of catches I wish it to be understood that in practice any desired number may be employed.

By constructing the device as above described the smallest sized cylinder adapted to fit over the rods may be employed since the catches do not operate to decrease the inside diameter of the pipe, but permit the grab to be passed over rods from the smallest size up to rods of the same diameter as the inside diameter of cylinder.

The object of outwardly beveling the lower end of the cylinder is to sharpen the same and to facilitate the entrance of the tools into the cylinder, and the purpose of slitting the ends is to enable the same to yield or expand outwardly.

Having described my invention, what I claim is—

A drill rod grab consisting of a cylinder provided with oppositely disposed inwardly projecting spring catches, said catches being struck out of the material of the cylinder, and cut away on opposite sides at their lower ends, as at *b*; substantially as described.

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

WILLIAM H. WISHERD.

Witnesses:

G. J. KNUDT,  
A. STEPHENSON.