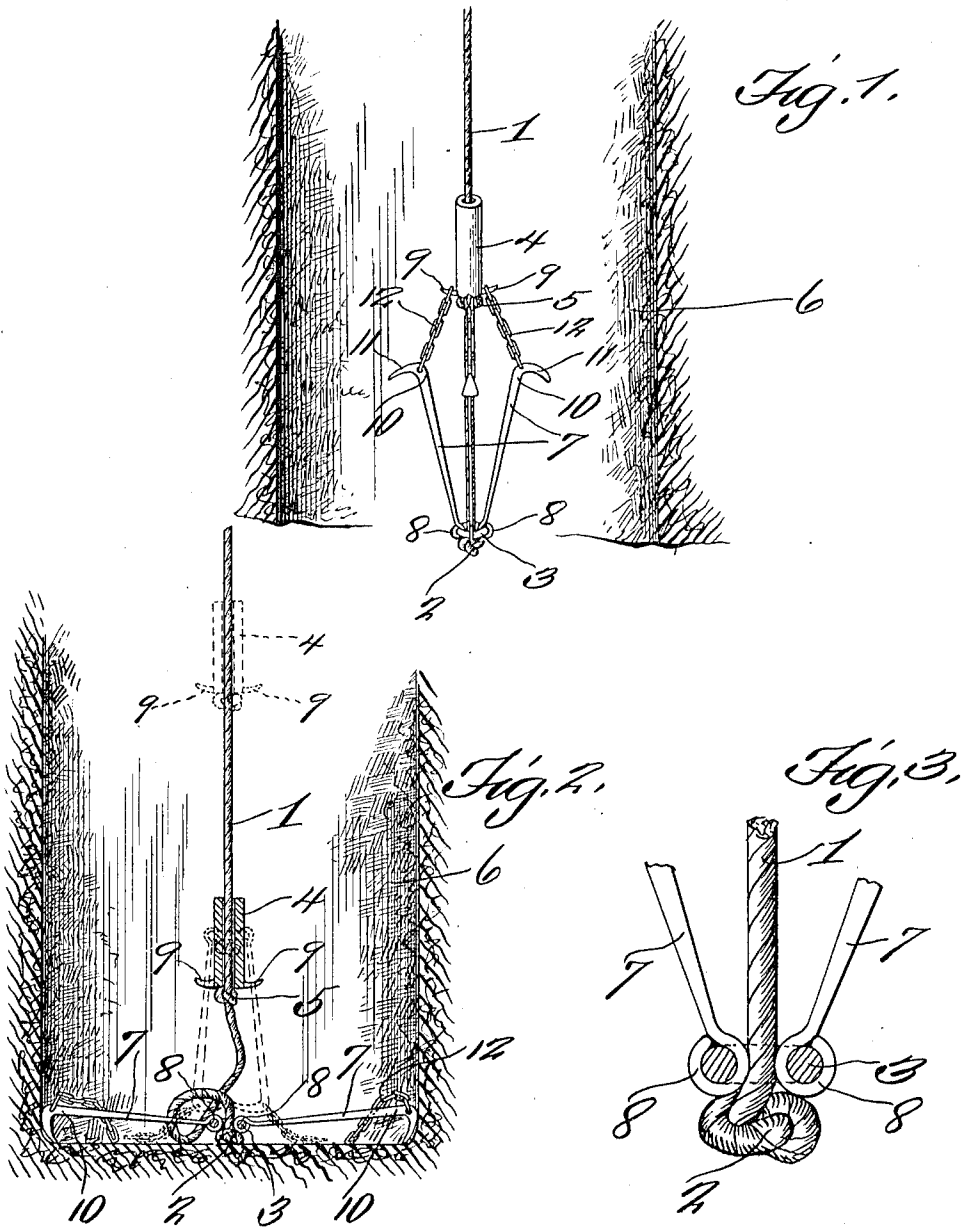


L. P. KING.
 GRAB HOOK.
 APPLICATION FILED NOV. 30, 1912.

1,064,075.

Patented June 10, 1913.



Witnesses
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UNITED STATES PATENT OFFICE.

LEE PERKINS KING, OF ST. JOSEPH, MISSOURI.

GRAB-HOOK.

1,064,075.

Specification of Letters Patent.

Patented June 10, 1913.

Application filed November 30, 1912. Serial No. 734,266.

To all whom it may concern:

Be it known that I, LEE P. KING, a citizen of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented a new and useful Grab-Hook; 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.

This invention relates to a new and useful grappling device.

One of the objects of the invention is to provide an improved grappling device for removing foreign matter and articles from wells or cisterns.

Another object of the invention is the provision of a ring having a series of hooks adapted to be held substantially vertically when entering a well or cistern, but when the ring contacts with the bottom of the well, the series of hooks are automatically released, so as to fall to substantially horizontal positions, in order to reach all foreign matter at the bottom of the well. When the ring is raised, the hooks close below the ring, so as to grapple the foreign matter or like in the well.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawings:—Figure 1 is a view in perspective of the improved grappling device, showing the same entering the well. Fig. 2 is a view showing the grappling device at the bottom of the well, also illustrating in dotted lines the positions of the hooks, when the device is being raised. Fig. 3 is a detail view.

Referring to the drawings 1 designates the cable or rope having a knot 2 at its lower end, which supports the ring 3. The cable or rope 1 passes through a sleeve 4, the same being supported by a knot 5 of the rope, when the grappling device is in the act of entering the well or cistern 6. A series of bars 7 is provided. Each bar terminates at one end in an eye or loop 8, which receives

the round portion of the ring 3, as shown in the drawings. In this manner the bars 7 are pivotally swung on the ring. The sleeve 4 at its lower end is provided with a series of prongs 9, while the end portions 10 of the bars 7 terminate in hooks 11, there being chains 12 passing through the hooks. These chains 12 are adapted to engage the prongs 9, so as to hold the bars 7 substantially vertical, when entering a well or cistern, as shown in Fig. 1. When the ring 3 contacts with the bottom of the well or cistern, the rope or cable between the knots 2 and 5 becomes slack or falls loose, owing to the fact that the sleeve 4 becomes nearer the ring 3, and when such is the case the loops of the chains 12 disengage the prongs 9, thus allowing the hooks 11 to spread in order to gather the refuse from the bottom of the well or cistern. Subsequently as the rope or cable is raised the hooked bars 7 assume positions as shown in dotted lines in Fig. 2, so that any foreign matter or articles may be grappled in order to be extracted or removed from the well.

The invention having been set forth, what is claimed as new and useful is:—

In combination, a rope having a knot at its extreme end and provided with a second knot spaced from the first knot, a ring on the rope supported by the first knot, a series of hooked bars pivotally swung on the ring, a sleeve arranged telescopically on the rope and supported by the second knot and provided with a series of prongs, and chains connected to the hooked ends of said bars and having their upper end portions loosely connected to said prongs, so as to become disengaged when the ring contacts with the bottom of a well.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEE PERKINS KING.

Witnesses:

C. L. BAKER,
R. H. DUMONT.