No. 644,633. Patented Mar. 6, 1900.

C. A. PENTICOFF.

DEVICE OR TOOL FOR EXTRACTING OBSTRUCTIONS FROM DEEP WELLS.

(Application filed Dec. 21, 1899.)

(No Model.)

Fig. 1.

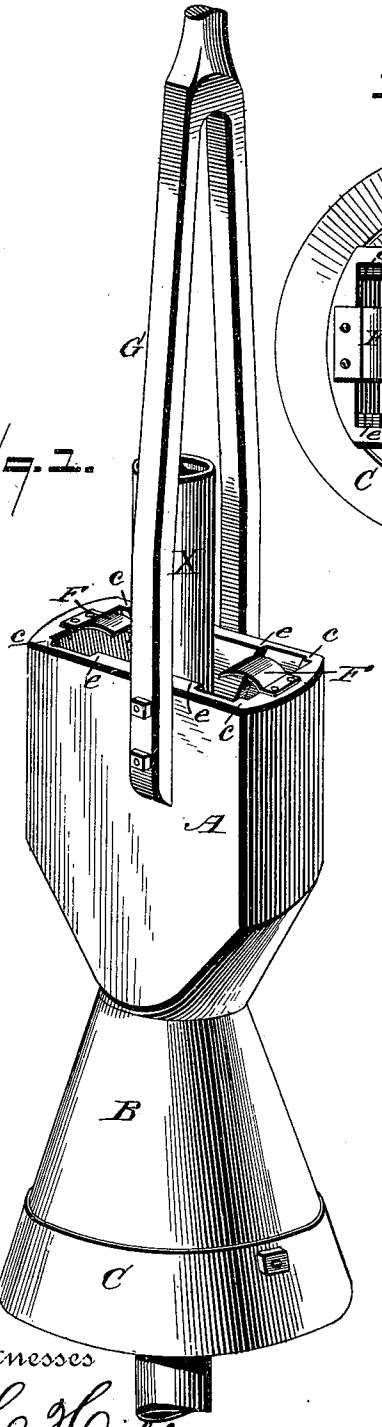


Fig. 2.

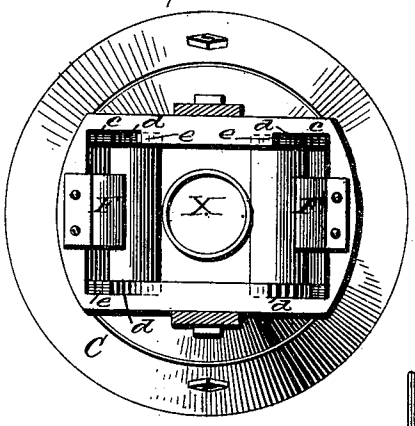
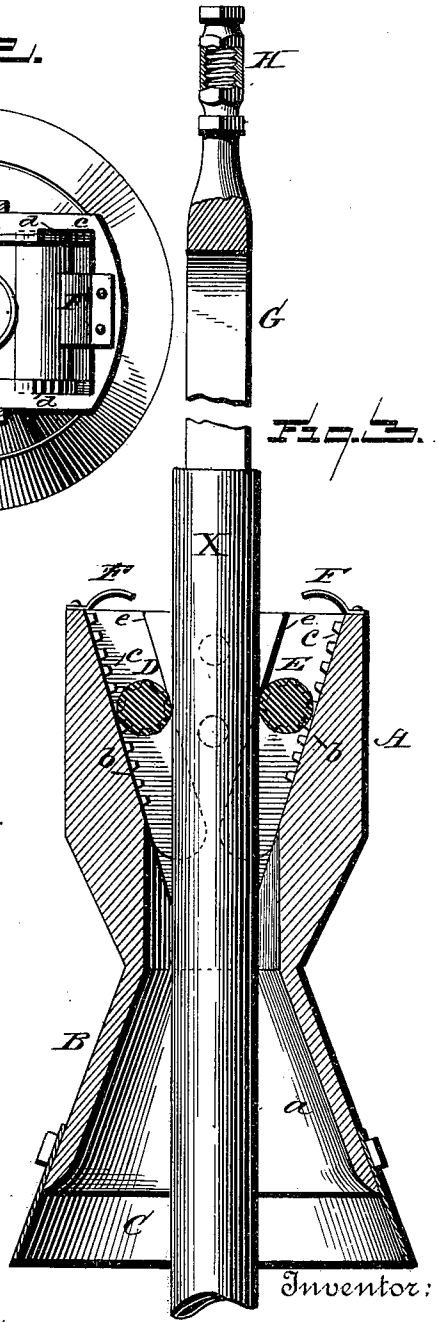


Fig. 3.



Witnesses

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES A. PENTICOFF, OF PEARL CITY, ILLINOIS.

DEVICE OR TOOL FOR EXTRACTING OBSTRUCTIONS FROM DEEP WELLS.

SPECIFICATION forming part of Letters Patent No. 644,633, dated March 6, 1900.

Application filed December 21, 1899. Serial No. 741,156. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. PENTICOFF, a citizen of the United States, residing at Pearl City, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Devices or Tools for Extracting Obstructions from Deep Wells; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has for its object to provide a device or tool for removing sections of pipe or other obstructions from deep wells which have accidentally dropped into the well from any cause; and it consists in a device or tool constructed substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a perspective view of the device, showing a pipe-section held by the same; Fig. 2, a sectional elevation thereof; Fig. 3, an end view of the same.

In the accompanying drawings, A represents the body of the device, formed with a flaring extension B, with a funnel-shaped opening *a* for convenience in placing over the end of the pipe-section or other obstruction. This flaring extension B is provided with a circumferential plate C, which is detachably connected to the extension by bolts and nuts or other well-known means. This plate is connected to the extension for the purpose of increasing the circumference of the same, so as to fill drill-holes of increased diameter, and thus prevent the obstruction or pipe which is to be drawn out from lodging between the side wall of the drill-hole and the extension B.

It is the purpose of the invention to have the extension B at all times of a circumferential size as to properly fit the diameter of the drill-hole, and when the drill-hole is of decreased diameter the plate C is removed and the device used without it.

The body A of the device is preferably rectangular in cross-section and has inclined walls *b*, with rack-teeth *c*, with which engage pinions *d* upon the ends of clutching-rollers D E. These rollers are retained in engagement with the rack-teeth *c* by shouldered guides *e* opposite to the rack-teeth and the rollers prevented from dropping out of the device when turned upside down or from other causes by the retaining-plates F. These plates may be of any suitable form and construction and may be either formed separately and afterward secured in place on the body A, or the plates may be cast with the body in the shape of a thin lip, and after the clutching-rollers are dropped into place the lips can be bent into shape over the opening in the body.

I do not wish to be understood as confining myself to any special construction or form of plates or the manner of connecting them to the body of the device, and many changes or modifications may be made in the several details of construction without affecting the essential features of the invention.

A suitable bail G is connected to the body in any convenient manner and is provided with a screw or other suitable coupling H for connecting a sucker or other rod thereto to lower the device into the drill-hole.

A very simple and practical device is provided that will effectually draw from the drill-hole any obstruction that may fall into the well. I have shown in the drawings a section of pipe X in order to illustrate its relative position when engaged with the device and about to be drawn out of the well. The clutching-rollers will grab the pipe and cause a dead-lock as soon as the pipe enters between them, and when the device is drawn upward the grip upon the pipe will be increased by the cam action of the rollers.

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

1. A device or tool for extracting obstructions from deep wells, consisting of a suitable body having a central opening with inclined walls, rack-teeth upon the inclined walls, and clutching-rollers having pinions adapted to engage with the rack-teeth, substantially as and for the purpose described.

2. A device or tool for extracting obstructions from deep wells, consisting of a suitable body having a central opening, clutching-rollers located therein, pinions upon the ends of the rollers to engage rack-teeth in

the central opening of the body, and retaining-plates extending over the opening in the body to prevent the rollers from dropping out, substantially as and for the purpose specified.

3. A device or tool for extracting obstructions from deep wells, consisting of a suitable body having a flaring extension, a detachable circumferential plate upon the extension, suitable clutching-rollers in the body of the tool or device, and a suitable bail connected to the body and provided with means for attaching thereto a suitable sucker or other rod, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES A. PENTICOFF.

Witnesses:
JOHN H. KNAPP,
GEO. W. DOW.