T. PHILLIPS & J. GOLLETZ.

Drills for Well-Boring.

No. 144,475. Patented Nov. 11, 1873.

Fig. 1

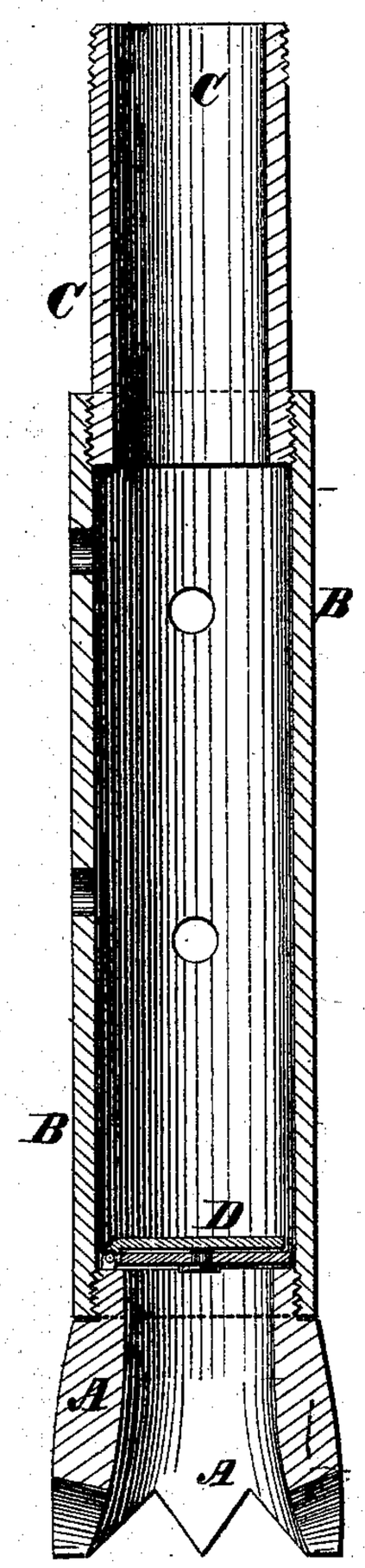
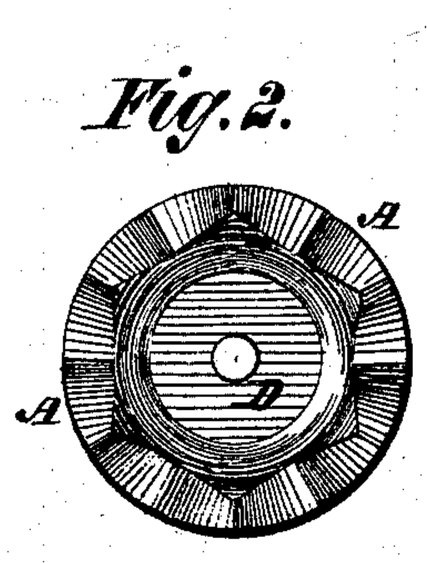


Fig. 2.



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UNITED STATES PATENT OFFICE.

TIMOTHY PHILLIPS AND JOSEPH GOLLETZ, OF LEAVENWORTH, KANSAS.

IMPROVEMENT IN DRILLS FOR WELL-BORING.

Specification forming part of Letters Patent No. **144,475**, dated November 11, 1873; application filed October 11, 1873.

To all whom it may concern:

Be it known that we, TIMOTHY PHILLIPS and JOSEPH GOLLETZ, of Leavenworth, in the county of Leavenworth and State of Kansas, have invented a new and useful Improvement in Drill for Well-Boring, of which the following is a specification:

Figure 1 is a longitudinal section of our improved drill. Fig. 2 is a bottom view of the same.

Similar letters of reference indicate corresponding parts.

Our invention has for its object to furnish an improved drill for well-boring, which shall be so constructed as to do its work faster and better than the ordinary borers, will work farther into the ground before it has to be taken out and cleaned, and shall be more conveniently manipulated. The invention consists in the drill, the perforated tube, the pipe, and the valve, constructed and operating in connection with each other, as hereinafter fully described.

A is the drill, which is made tubular and somewhat flaring, so as to cut a hole a little larger than the body of the drill. The lower edge of the drill A is serrated, as shown in Figs. 1 and 2, so as to cut a ring-groove into the stratum through which it is boring, the core or central part of the cut or bore passing up through the cavity of the drill. The upper end of the drill A is rabbeted, and has a screw-thread cut upon it, upon which is screwed the lower end of a tube, B, in the sides of which are formed a number of holes to allow the water to flow out, and thus lessen the weight as the drill is moved up and down. In the upper end of the tube B is screwed a section of pipe, C, and other sections may be added as the hole increases in depth. To the upper end of the drill A is hinged a valve, D, opening upward into the tube B, so as when the drill is raised to carry the contents of the tube and pipe up with it.

With this drill a hole may be sunk by hand to the depth of two hundred feet, and with a lever to any desired depth. This drill also enables the operator to know exactly the kind and depth of stratums through which a hole is being sunk. Another advantage of this construction is that, should the parts become accidentally detached a screw-rod can be readily inserted and the detached parts drawn out. Much time is also saved with this drill, since it has to be withdrawn much less frequently for cleaning out the hole than when the ordinary borers are used.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The tubular and flaring drill A, perforated tube B, pipe C, and valve D, constructed and operating in connection with each other, substantially as herein shown and described.

TIMOTHY PHILLIPS.
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