G. W. Borren.

Well-Borer

No. 75355 Patented Mar. 10, 1868.

Fig. 2.

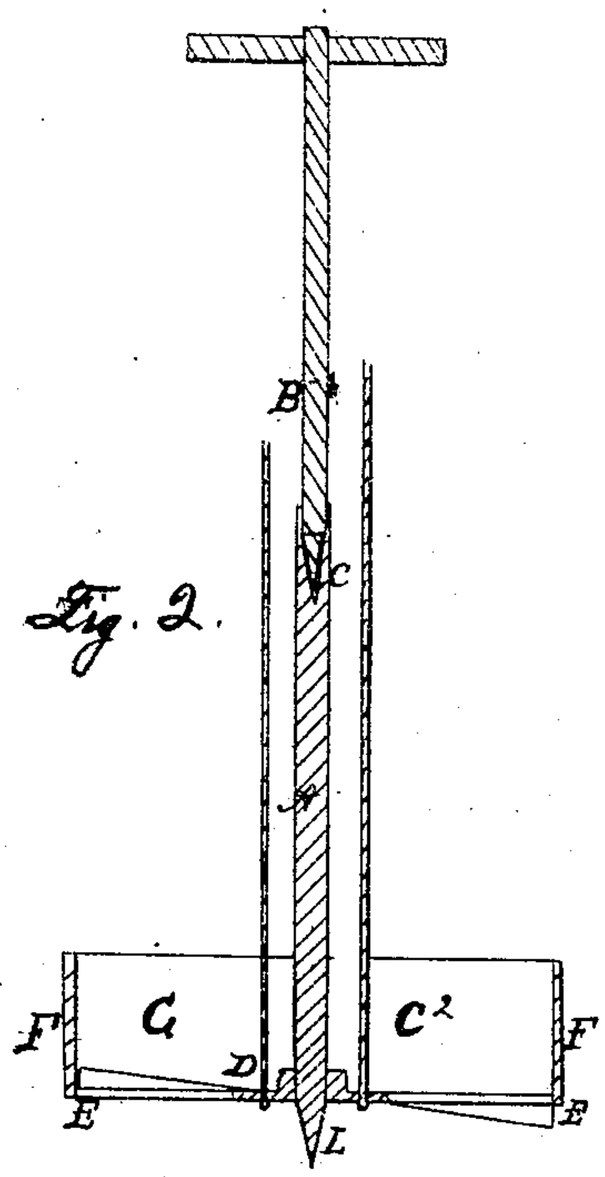
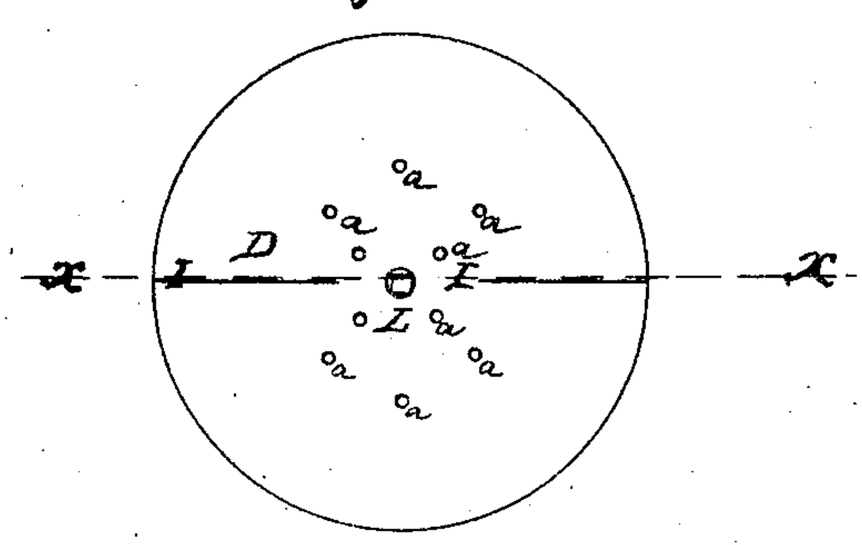


Fig. 1



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GEORGE W. BOWEN, OF FORT WAYNE, INDIANA.

Letters Patent No. 75,355, *dated March* 10, 1868.

IMPROVED WELL-BORER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE W. BOWEN, of Fort Wayne, in the county of Allen, and State of Indiana, have invented a new and improved Well-Borer; and that the following description, taken in connection with the accompanying drawings hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

The present invention relates to a tool or implement for the boring or sinking of wells in quicksand, or for cleaning out wells, which tool is of such a construction as to enable the work to be done with great rapidity, facility, and safety, and in the most satisfactory and perfect manner, as will be obvious from the following detail description of the same, reference being had to the accompanying plate of drawings, in which—

Figure 1 is a view of the under side or face of the boring-end of the tool, and

Figure 2 a central vertical section, taken in the plane of the line *x x*, fig. 1.

A, in the drawings, represents the shank or stem of the tool, which at one end, C, is adapted to receive an extension-rod or handle, B, for lengthening or extending it out to bore a well of a greater or less depth; C^2, the boring-end of the tool, which is formed of a circular-shaped disk or plate, D, around the periphery of which, E, is a raised edge or rim, F, forming a box, G. This disk D, at two points in radial lines with its centre, H, is cut or slit from a point, I, near its centre, to its raised edge F, with the sides of such slit turned or bent, the one up and with the other down in each case, leaving an opening or space, J, between the two. The turned-down edges or sides of the slits to the disk are provided with sharp or cutting-edges, either by attaching a separate steel blade thereto, or by properly sharpening the edges. The disk D is also perforated with small holes *a*. L, a centre-point, upon the under side of disk D, on which the tool, as it is used, turns.

In using the tool, if to bore, or sink, or clear out a well, it is inserted therein, and then turned around within the same, the dirt passing up through the openings formed by the turned up and down sides of the slits in the disk, into the box above the disk, by and in which it is removed as the tool is drawn out of the well. The perforations in the disk allow the water to pass through, if any there be in the well, and by giving to the turned-up edges of the slits a sufficient spring they can yield to any large substance passing through the slits.

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

1. The circular plate D, for well-cleaning, when provided with holes *a*, for the purpose of allowing the escape of water from the dirt or sand being lifted from the well, as herein set forth for the purpose specified.

2. The plate D, having spring cutting-edges, all formed in one piece, and provided with holes *a*, as and for the purpose specified.

3. The application of the ropes to the plate D for the purpose of elevating the tool from the well, as and for the purpose specified.

4. The tool for cleaning wells, constructed as described, consisting of the perforated disk D, having spring cutting-edges, surrounded by the rim F, and provided with adjustable handle A B, as herein shown and described.

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Witnesses:

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