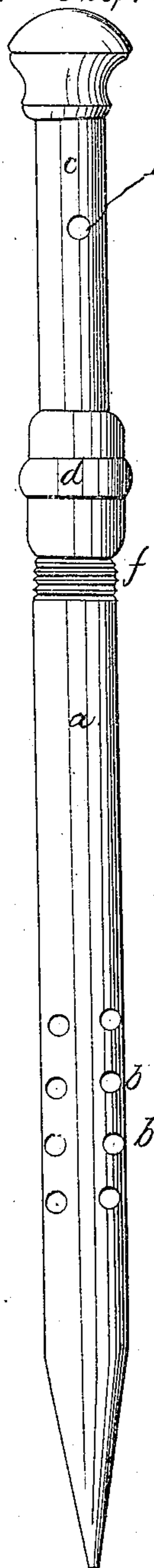


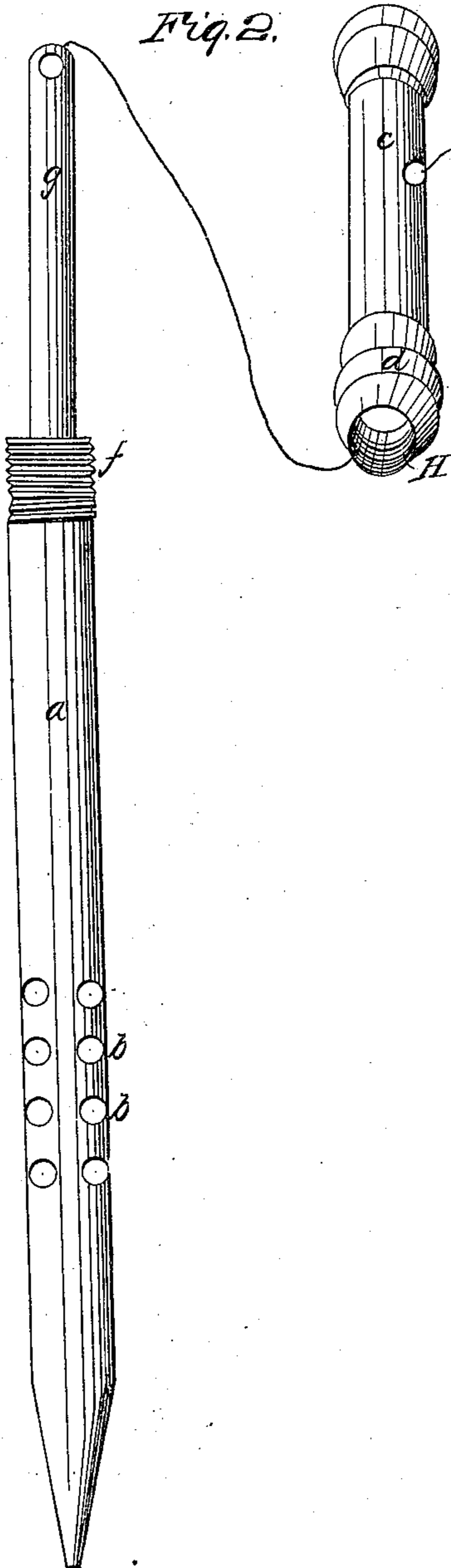
*J. Suggett,  
Well Tubing.*

*N<sup>o</sup> 52,463.*

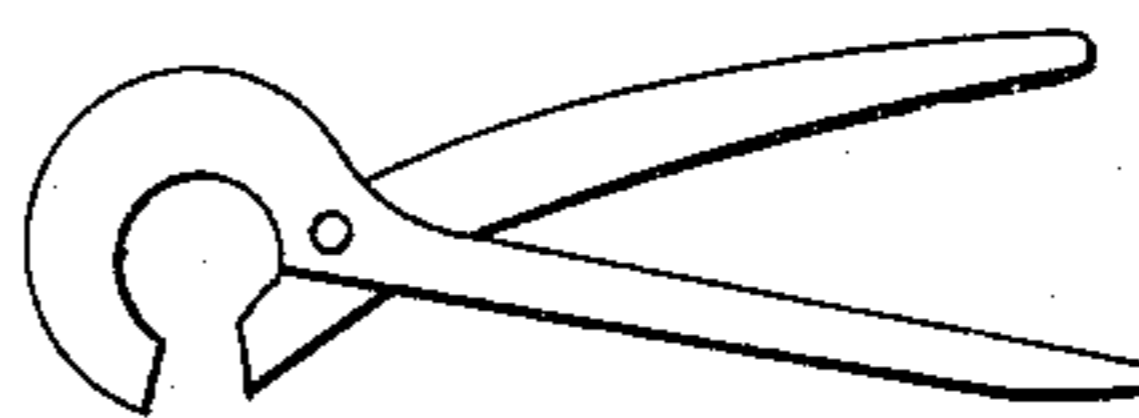
*Patented Feb. 6, 1866.*



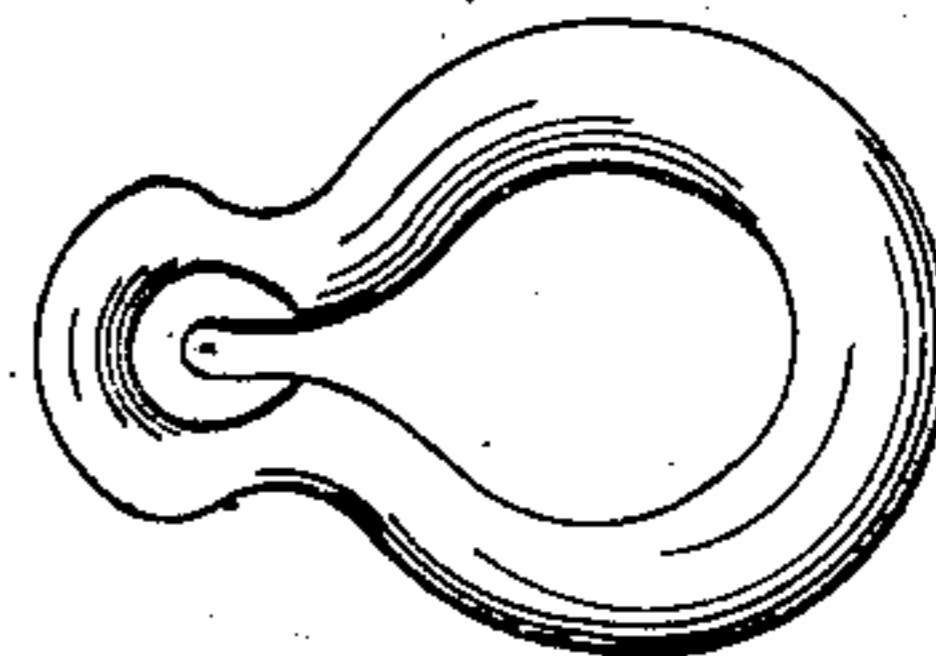
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Witnesses:*

*Wm. Randall  
Chas. Horley*

*Inventor:*

*James Suggett*

# UNITED STATES PATENT OFFICE.

JAMES SUGGETT, OF CORTLAND, NEW YORK.

## IMPROVEMENT IN MODE OF SINKING WELLS.

Specification forming part of Letters Patent No. 52,463, dated February 6, 1866.

*To all whom it may concern:*

Be it known that I, JAMES SUGGETT, of the village of Cortland, county of Cortland and State of New York, have invented a new and Improved Mode and Apparatus for Sinking Wells; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents the apparatus complete; Fig. 2, the various parts of which it is made up; Fig. 3, the tongs used to loosen the pipe when driving, and Fig. 4 a clamp-ring used in connection with a chain in withdrawing the pipe.

The method now in use, and substantially described by me in my specifications annexed to Letters Patent granted me March 29, 1864, is first to drive down a bar or drill, then withdrawing the drill and inserting a pipe in its place, through which the water is drawn.

The withdrawing the drill is often the most difficult part of making a well. To avoid this difficulty I so strengthen and arm the pipe that it may itself be driven down, dispensing with the use of any separate bar or drill. I use a pointed barrel or pipe, *a*, with openings at or near the point *b b*, and also with a thread cut upon the upper end, upon which I screw a cap or armor-piece, *c*, the end of the pipe fitting against a shoulder, *H*, at the bottom of the

screw in the armor-piece. This piece is made solid and strong to bear the blows it must receive in driving down the pipe. In order to strengthen the pipe and prevent its bending laterally, and at the same time to prevent the entrance of dirt into the pipe through the openings *b b* in its passage through the ground, I fill the pipe *a* with a solid rod, *g*, of about the same length with the pipe. When the pipe is driven to the required depth the armor-piece is unscrewed and removed, the rod *g* drawn out, and any pump may, by means of a proper coupling, be attached to the pipe, and a complete well is formed.

I do not intend by anything herein contained to disclaim the using a bar or drill in putting down wells, when desired, as set forth in my specification in the patent granted me March 29, 1864.

What I claim and desire to secure by Letters Patent, is—

1. The armor-cap *c*, with shoulder *H* and thimble *d*, for the purpose described.
2. In combination with cap *c*, thimble *d*, and shoulder *H*, the pump-tube *a*, for the purpose of driving said tube directly into the earth, substantially as set forth.

JAMES SUGGETT.

Witnesses:

R. H. DUELL,  
CHAS. FOSTER.