A. B. Parsons,

Well Tubing.

No. 78,689. Patented June 9, 1868.

Fig. 1.

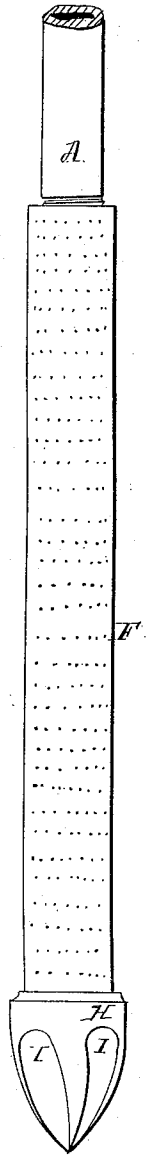


Fig. 2.

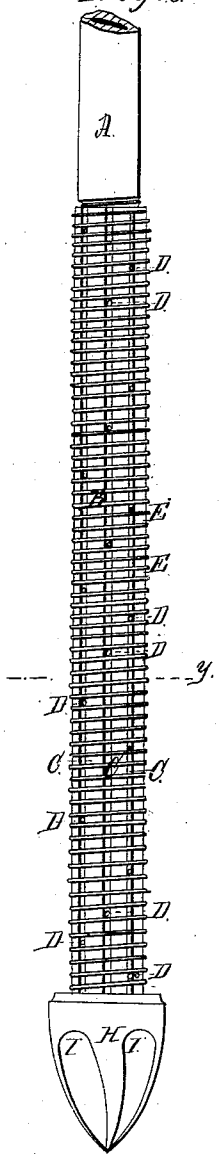


Fig. 3.

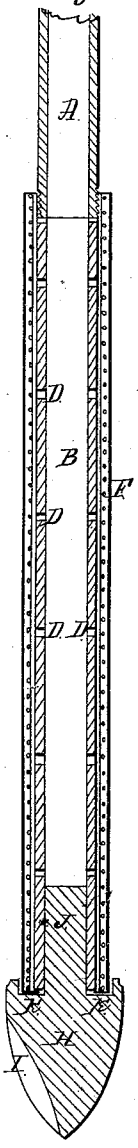


Fig. 4.



Witnesses:
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United States Patent Office.

A. B. PARSONS, OF DUNTON, ILLINOIS, ASSIGNOR TO HIMSELF AND EDWARD REDHEAD, OF LA CROSSE, WISCONSIN.

Letters Patent No. 78,689, *dated June* 9, 1868.

IMPROVEMENT IN TUBE-WELLS.

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, A. B. PARSONS, of Dunton, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Well-Tubing; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form a part of this specification, in which—

Figure 1 represents a side elevation of my invention.

Figure 2, a side elevation, with the perforated case or screen removed.

Figure 3, a vertical sectional view at the line *x* in fig. 1; and

Figure 4 a transverse sectional view at the red line *y* in fig. 2.

The nature of my invention consists in a novel construction of the lower section of the pipe of a drive or bored well, and also in a novel point to said pipe.

To enable those skilled in the art to manufacture and use my invention, I will proceed to describe the same with particularity.

The same letters of reference refer to the corresponding parts in the different figures.

A is a section of the ordinary pipe used in wells of this kind, it being screwed together in sections to the top of the well. There is a section of pipe B screwed to the lower end of the pipe A, which has grooves C in its outer surface, and there are holes, D, drilled from these grooves through into the interior of the pipe. The grooved part of the pipe is wound with wire E, and the whole covered with a perforated or wire screen or cover, F. Instead of grooves in the surface of the pipe B, the same object may be accomplished by casting ribs on the surface, and then drilling the holes through the pipe, between the ribs, the object being to have a protected space, in which the water can circulate freely to pass through the holes D to the interior of the pipe. The use of the wire E is to increase the unobstructed space beneath the screen F, as with the wire in use there is not only a vertical space in the groove, but a spiral space between the wires, thus leaving nearly the entire space under the screen free for the water to flow uninterruptedly into the pipe B.

H is a point, which serves to penetrate the earth as the pipe or tubing is being driven into the ground. There are spiral grooves on the sides of said point, which cause it to slightly turn as it is being driven into the ground, and they are so arranged as to turn the point in the direction to tighten the joints where the different sections of the pipe are screwed together. The shank T of the point H extends loosely into the pipe, and there is a recess, K, in the shoulder of said point, into which the pipe B and screen F are pressed as they are being forced into the ground. I also frequently use, especially in stony soil, a sheet-iron tube, which covers the screen F when it is being driven into the ground, to protect it and prevent it from being injured. The lower end of said sheet-iron tube rests in the recess K, and is so arranged that when the water is reached, by raising the pipe A, the pipe B and screen F are raised out of the sheet-iron pipe, leaving that with the point H lower down in the well.

Having thus fully described the construction and operation of my invention, what I claim, and desire to secure by Letters Patent, is—

The combination of the tube B, provided with grooves and holes, the spirally-arranged wire coil E, and the gauze screen F, arranged and operating in the manner and for the purposes set forth.

A. B. PARSONS.

Witnesses:

WESLY TREWETT,

HOLLIS SABIN.