

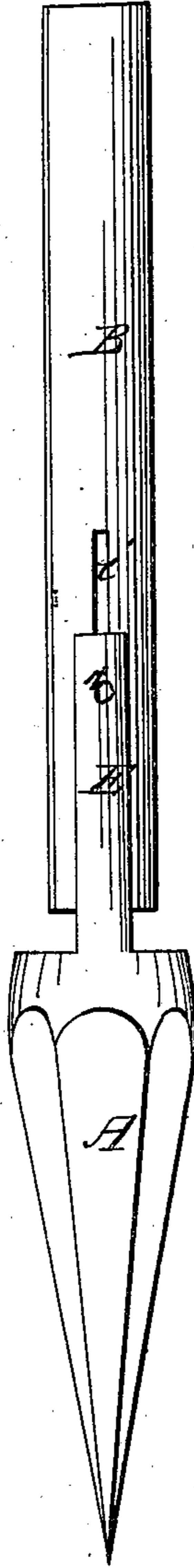
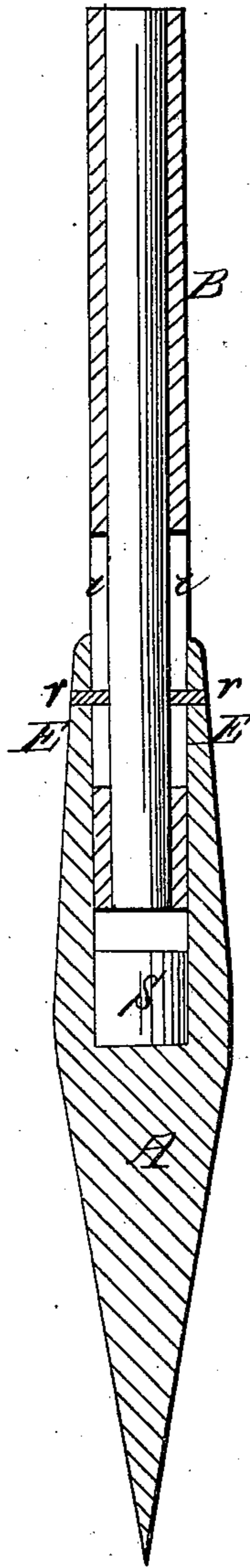
W. Martin,  
Well Tubing.

N<sup>o</sup> 76,485.

Patented Apr. 7, 1868.

Fig: 1

Fig: 2.



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# United States Patent Office.

WILLIAM MARTIN, OF TARR FARM, PENNSYLVANIA.

*Letters Patent No. 76,485, dated April 7, 1868.*

## IMPROVEMENT IN WELL-TUBES.

*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, WILLIAM MARTIN, of Tarr Farm, in the county of Venango, and State of Pennsylvania, have invented a new and improved Well-Tube; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a longitudinal axial section of my invention.

Figure 2 is a side view of my improved well-tube.

Similar letters of reference indicate corresponding parts in the two figures.

In this invention, the point has two ears, by which it is attached to the upper part of the tube, the latter having a longitudinal slot under the ears, through which it is riveted to them. While the well-tube is driving into the ground, the lower end of the cylindrical tube steps in a socket in the upper end of the conical point, and, when the well has been sunk to the required depth, the upper part of the tube is raised, so as to allow the water to enter.

In order that others skilled in the art to which my invention appertains may be enabled to make and use the same, I will proceed to describe it in detail.

In the drawings, A represents the conical or polyhedral point, and B the hollow cylindrical upper part of my improved well-tube. The point A is provided with two upright ears, E E, longitudinally concave on their inner side, so as to fit closely the outer surface of the tube B, which slides vertically between them. These ears are about two inches in length, and are riveted to the tube B by stout rivets, *r r*. A socket, S, is bored down about three inches into the upper end of the point A, to receive the lower end of the tube B while the instrument is being forced into the ground. The rivets *r r* are, at their outer end, firmly fixed to the ears E E, and extend through longitudinal slots, *i i*, made in the walls of tube B, under the ears, terminating in flat heads or nuts setting firmly against the inner walls of the tube, on either side of the slots. The slots *i i* are about three-sixteenths of an inch in width and four inches in length, extending vertically upward from a point about one inch from the lower end of the tube. The rivets *r r* are about three-sixteenths of an inch in diameter. The ears E E are of sufficient width and thickness to hold the rivets firmly, and keep the point A and tube B steadily and firmly attached together. The upper part of the conical point A, at *a a*, is made larger in diameter than the tube B, so that the outer side of the ears shall be flush with it, in order to make the hole in the ground slightly larger than the tube B, and facilitate the moving and adjusting of the latter. The whole combined tube, thus constructed, is driven into the ground until water is reached, when the operation of driving is suspended, and the tube is raised up till a space is left between it and the point A, through which the surrounding water may freely enter the tube at its bottom. It is secured in that position by fastening it properly at the surface of the ground, and the well is then ready for use.

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

The point A, having the sockets S, the ears E E, and the broad shoulders *a a*, in combination with the tube B, having the longitudinal slots *i i*, and with the rivets *r r*, operating in the slots *i i*, substantially as and for the purpose described.

To the above specification of my improvement, I have signed my hand, this tenth day of July, 1867.

WM. MARTIN.

Witnesses:

HARRY McMILLIN,

A. H. WILLIAMS.