

D. Baker,
Well Tubing.

N^o 8,582.

Patented Sept., 1868.

Fig. 1.

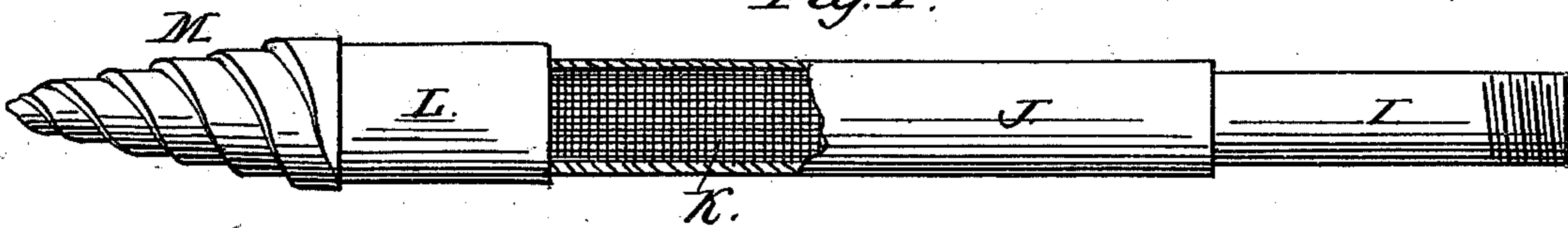


Fig. 2.

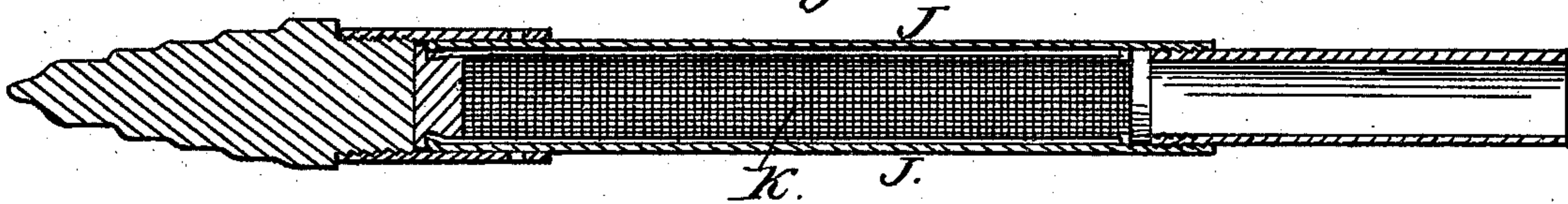
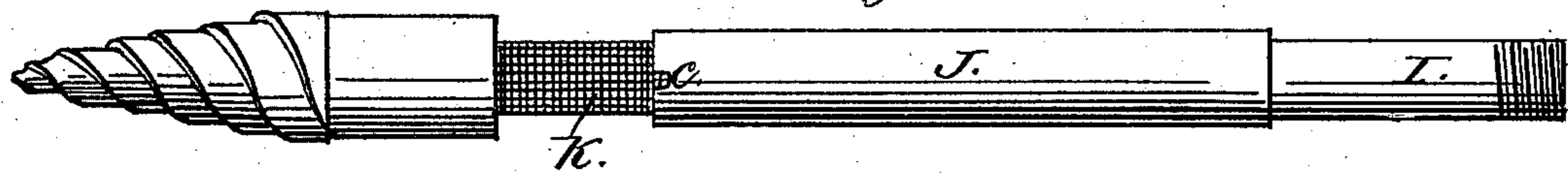


Fig. 3.



Witnesses:
Wm. Wadsworth
Chas. H. Landy

Inventor:
David Baker

United States Patent Office.

DAVID BAKER, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 81,582, dated September 1, 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, DAVID BAKER, of Boston, in the County of Suffolk, and in the State of Massachusetts, have invented new and useful Improvements in Well-Tubes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in providing a well-tube with a slide-strainer either on the outside or inside of the tube.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the annexed drawings, forming part of this specification, the slide is represented on the outside of the strainer, but it can in like manner be constructed on the inside.

I represents the well-tube, securely fastened to the slide J, which, although larger, forms a part of the same, and slides or runs over the strainer K, into the coupling L, and is held there by means of a notch, *c*, on each side of the slide, which notches fasten on to corresponding lugs in the coupling, to prevent the tube from turning without the point M. This point or screw is made of iron, steel, or other suitable material, with one, two, or more threads, forming a spiral inclined plane, with perpendicular sides, and curved or square shoulders, and is securely fastened in the coupling L.

The strainer-K is made of wire or any other suitable material, to prevent sand and other matter from entering the tube, and its edges dove-tailed and soldered together, so that when the slide is raised and the water presses on all sides, they will not give, but remain in their proper position.

The strainer is fastened to the top of the point or screw M, inside of the coupling L, at a sufficient distance from the coupling to allow the slide J to come between.

For purpose of preventing sand or other matter from coming in between the slide J and the coupling L, when the slide is down, there is a groove on the slide J, just below the upper edge of the coupling L, which is filled with any kind of packing. This is easily pulled out with the slide when the same is raised.

The diameter of the strainer should be the same as that of the well-tube I, so that the same-size stream of water can pass through the whole length of the machine.

The upper end of the strainer K is provided with a ring or rim on its periphery, corresponding with a similar ring or rim on the inside of the slide J, near its lower end, which rings are for the purpose of preventing the slide, when raised, from coming off the strainer.

When the tube is being sunk in the ground, the slide is in its proper place, over the strainer and inside the coupling, and in turning the tube, the notches in the slide and lugs in the coupling turn the screw-point the same way. When the tube then has been sunk to the distance required, and it is desired to raise the slide, all that is necessary is to raise the tube I, when the slide J will slip out of the coupling and uncover the strainer K, the rings in the top of the strainer and bottom of slide preventing it from coming off entirely, and thus allowing the water free access to the tube through the strainer.

If it is desired to have the slide on the inside of the strainer, it is arranged and works in the same manner, except that the strainer K may be fastened either on the top of the screw M, but close to the inside of the coupling L, or on the coupling itself; also, the rings or rims in the upper part of strainer and lower part of slide are reversed.

If necessary, the space or chamber, which in this case is formed between the strainer and the slide, may be filled with sand, to protect it and keep it in its proper shape on its passage down. As soon as the slide is raised, this sand will of course be pumped out through the tube.

The packing, preventing sand or other matter from entering between the coupling and the slide when the tube is being sunk in the ground, may be placed on the inside of the coupling, or above it, in any way that may be desired, just as well as in the groove on slide J.

In the annexed drawings I have shown one way of preventing the slide J from turning without the screw-

point M, by the use of notches and lugs, but the same result can be attained by several other modes. My object is simply to have an easy and sure way by which the slide, when inserted in the coupling, and turned from above the earth, will turn the point or screw at the same time.

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

1. The slide J, whether placed on the inside or outside of a strainer, in a well-tube, so arranged and secured to the point, and operating, as to leave the woven-wire as the only tube near the lower part of the well, substantially as and for the purposes herein set forth.

2. The combination of slide J with strainer K, well-tube I, and coupling L, with screw-point M, made and arranged and operating substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 25th day of April, 1868.

DAVID BAKER.

Witnesses:

LEOPOLD EVERT,

A. N. MARR.