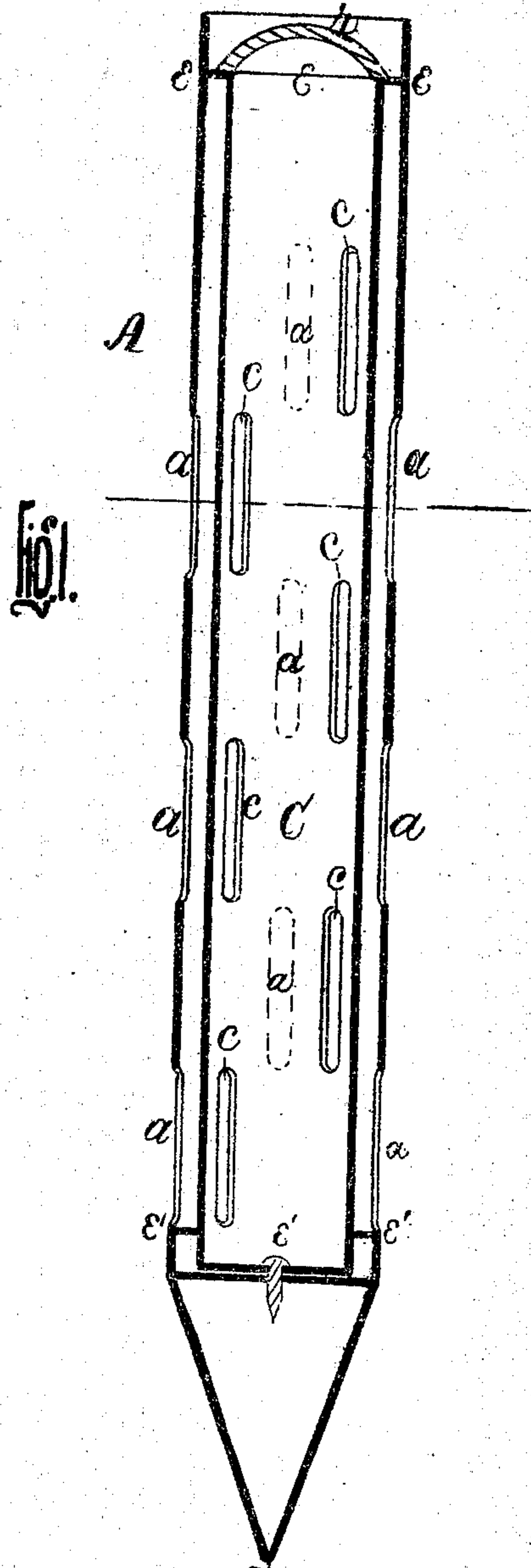
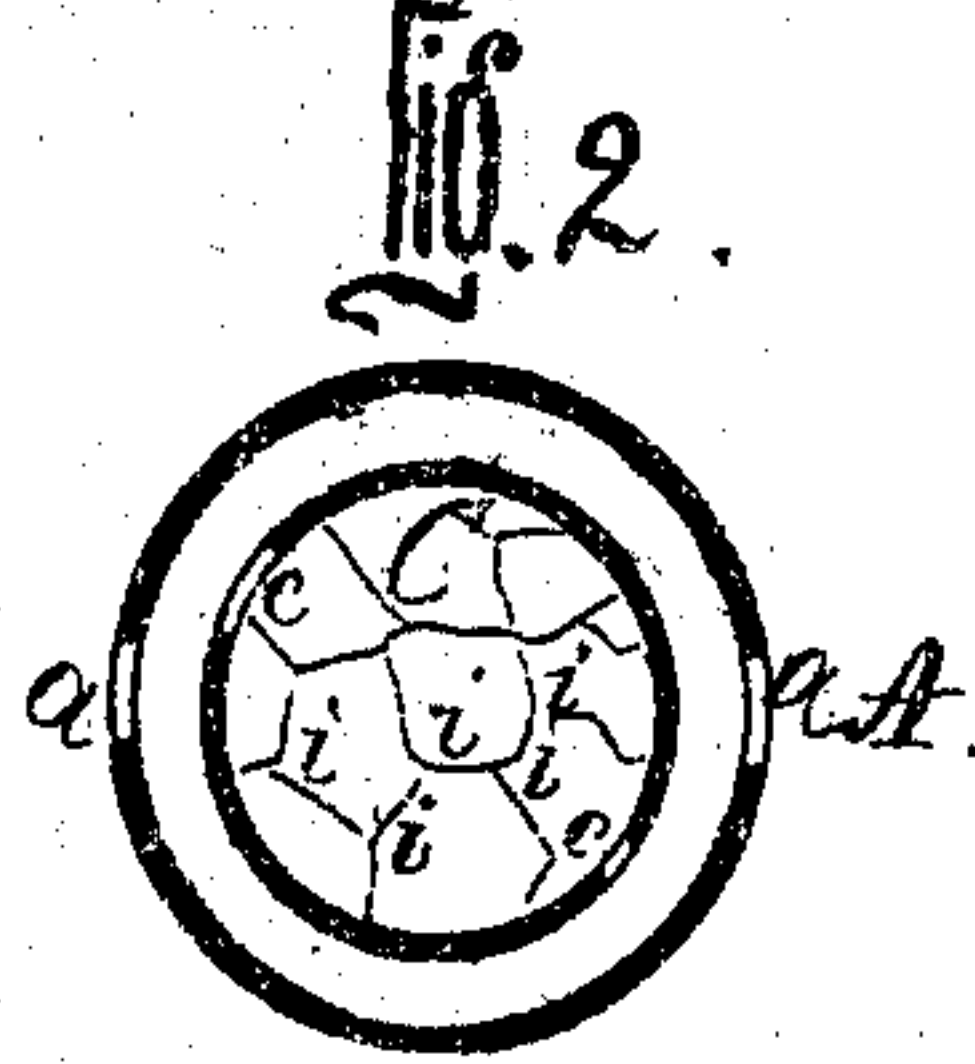


J. Dwight Kellogg. Well Tube.

71496



PATENTED
NOV 26 1867



Witnesses:
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J. P. Ellenorth.

Inventor:
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By *[Signature]*
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United States Patent Office.

J. DWIGHT KELLOGG, JR., OF NORTHAMPTON, MASSACHUSETTS.

Letters Patent No. 71,496, dated November 26, 1867.

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, J. DWIGHT KELLOGG, Jr., of Northampton, in the county of Hampshire, and State of Massachusetts, 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 vertical axial section of my invention, and

Figure 2 is a cross-section of the same.

In this invention a removable tube or chamber, designed to be filled with pebbles, or some similar material, is employed, in connection with the well-tube, for the purpose of filtering and cleansing the water.

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

In the drawings, A represents the well-tube, provided with a system of vertical slots, *a a*, for the admission of the water. Inside of this tube I employ a removable tube or chamber, C, the walls of which are pierced with a system of slots, *c c*, similar in size and position, in relation to each other, to the slots *a a* of the outer tube. The tube C is provided with a flange, *e*, around its upper end, another similar flange, *e'*, around it, a short distance from its lower end, and just at the bottom of the lowest slot, *a*, of the well-tube.

The object of the flanges, acting in combination, is to hold the inner tube in a proper position for the water to enter it freely on all sides. Another object of the lower flange *e'* is to form a shell for the reception of sand, dirt, and other substances that may get into the well-tube, and to enable the proprietor to remove all such obstructions by simply withdrawing the inner tube. This is accomplished by letting down into the well, whenever its condition requires it, a cord, having a hook attached to its lower end, a rod or bail, *r*, being fixed across the centre of tube C, at its upper extremity, for the hook to catch under. The inner tube, having been cleansed, may be returned to its place in the same manner. In lowering it to its position, care must be taken not to bring its slots *c c* directly in front of the slots *a a* of the well-tube, but the vertical rows of slots *c c* are to come half way between the vertical rows of slots *a a*. The upper end of the well-tube is marked to indicate the line of the slots *a a*, and to direct the operator in adjusting the inner tube, when it is lowered to its place. A short conical peg projects downward from the lower end of tube C, designed to enter a corresponding cavity in the floor of the well-tube, and to assist the flanges in keeping the inner tube in place. The inner tube thus constructed and situated, I fill with small clean pebbles, as shown at *i i*, fig. 2. The object of these pebbles is to filter and thoroughly cleanse the water in its passage through the tube. The upper flange *e* closes the space around the tube C, and forces all the water to enter the slots *c c* and pass up through mass of pebbles.

The invention has been thoroughly tested, and found to be a great improvement upon the systems of filtration hitherto used in connection with these wells. It is cheap, easily made and operated, never liable to get out of repair, and renders water perfectly sweet and clean that was previously too impure to be used for drinking or washing.

Instead of the pebbles, other substances that will operate in any equivalent manner may be used, such, for instance, as chips of wood, sticks, pieces of iron, charcoal, etc.

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

The removable slotted interior tube C, having the bail *r* and flanges *e e'*, adapted to contain the enclosed filtering substance *i i*, when used in combination with the well-tube A, substantially in the manner and for the purposes specified.

To the above specification of my invention I have signed my hand, this 23d day of September, 1867.

J. DWIGHT KELLOGG, Jr.

Witnesses:

ENOS PARSONS,

NATHAN K. ELLSWORTH.