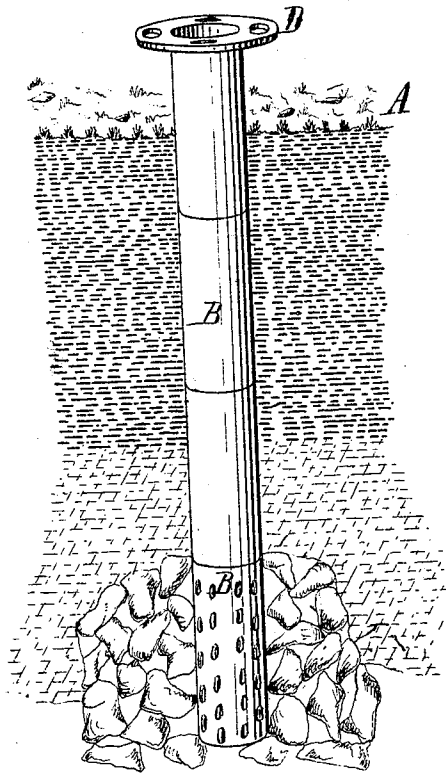


S. W. BELLES.
WELLS.

Patented June 6, 1876.

No. 178,400.



Attest:
Edward Barthel.
James O'Brien

Inventor:
S. W. Belles
By Atty.
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

SAMUEL W. BELLES, OF ORION, MICHIGAN.

IMPROVEMENT IN WELLS.

Specification forming part of Letters Patent No. **178,400**, dated June 6, 1876; application filed November 7, 1874.

To all whom it may concern:

Be it known that I, SAMUEL W. BELLES, of Orion, in the county of Oakland and State of Michigan, have invented an Improvement in Wells, of which the following is a specification:

The nature of this invention relates to certain new and useful improvements in that class of wells from which the water is drawn by means of pumps; and its object is to so construct the well that under no circumstances can surface water enter the reservoir from which the water is pumped without first having been compelled to percolate through the earth to a point near the bottom of the reservoir, thereby securing purer and better filtered water than can be obtained in wells of ordinary construction.

In the accompanying drawing, A represents the surface of the ground, below which a well is sunk or dug in the ordinary manner to the proper depth to secure water. At the bottom this well is filled around the pipe B, which leads from near the bottom to a point above the ground, and which stands or is placed in the center of the well, with cobble-stones C, to a suitable height, as may be necessary to form a water-reservoir. Over this reservoir, so filled, as described, with stones, and around

the same, extending down to a point near the bottom thereof, as shown, there is placed a cover composed of any cementitious substance through which water will not percolate, so that no water can enter said reservoir unless at the bottom thereof. The pipe B may be made of wood, iron, earthen tile, or other suitable material, in one piece, or in sections, with close joints, as may be deemed most preferable or desirable. The top section of said pipe should be of iron, and provided with a flange, D, to which to secure the corresponding flange of a metallic pump. After the parts are all in place the well should then be filled with the earth which was thrown out in digging the same, and the earth should be well tramped down.

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

The well described, consisting of the pipe B, having a perforated lower end, the cobble-stones C, and the cement covering, all constructed, arranged, and combined as described and shown.

SAMUEL W. BELLES.

Witnesses:

H. S. SPRAGUE,
CHAS. J. HUNT.