

W. A. Sharpe,

Well Tubing,

No 54,417.

Patented May 1, 1866.

Fig. 1.

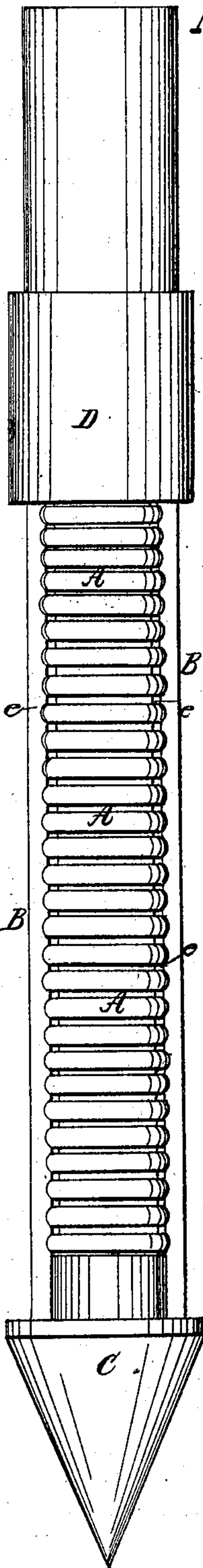


Fig. 2.

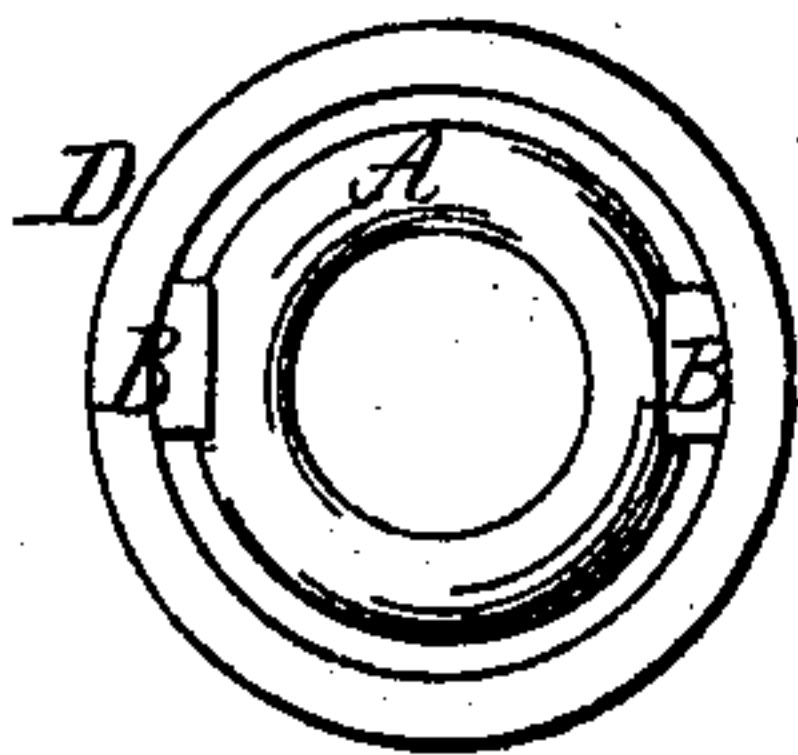
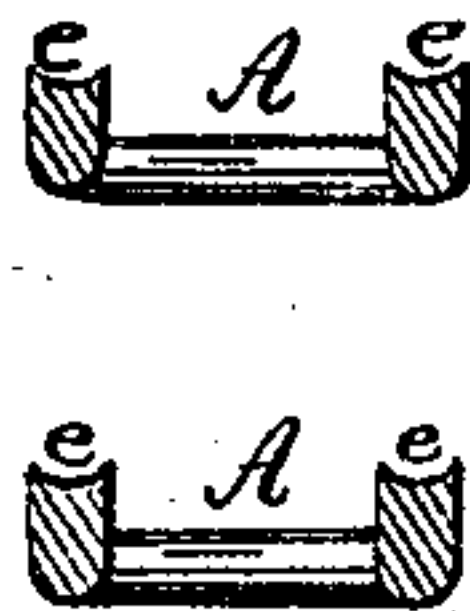


Fig. 3.



Witnesses

J. H. Phillips

S. D. Richardson

Inventor

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by Attorney P. B. Howe.

UNITED STATES PATENT OFFICE.

WILLIAM A. SHARPE, OF SYRACUSE, NEW YORK.

IMPROVED FILTER FOR WELL-TUBES.

Specification forming part of Letters Patent No. 54,417, dated May 1, 1866.

To all whom it may concern:

Be it known that I, WM. A. SHARPE, of Syracuse, in the county of Onondaga and State of New York, have invented a new and useful Improvement in the Strainer or Filter for Artesian Well-Tubing; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the figures and letters of reference marked thereon.

The nature of my invention consists in providing a tube of iron or other suitable material with a strainer or filter composed of a series of rings placed one above the other and held in their proper position by means of a frame-work which is firmly attached to one end of the tube in such a manner that the frame-work will support the rings in their proper position at the lower end of the tubing when it is inserted in the earth.

In the accompanying drawings, Figure 1 is a vertical elevation. Fig. 2 is a top view of the rings placed in their proper positions within the frame-work. Fig. 3 represents sections of the rings and lips or projections which keep the rings apart.

Each letter represents a like part in all the figures.

A A are the rings. B B are bars which are attached to the point C and to the ring or coupling D in such a manner as to form a frame-work to hold the rings A A in their proper position. e e are the lips or projections that keep the rings apart to permit a free flow of water, the tube being of sufficient length to extend downward through the strata of earth containing the impure surface water to the strata (generally of sand and gravel) where pure water can be found.

The filter is attached to the lower end of the tube and is consequently within the strata containing the pure water.

A pump is attached to the tube, and by its action water is drawn in through the meshes of the strainer, while at the same time fine sand and small particles of gravel may be excluded by having the rings placed near each other, thus possessing a great advantage over any other filter now in use, as it is easily adjusted in the manufacture to fine or coarse sand or gravel.

The advantages of rings over a spiral coil are, first, they will sustain the pressure necessary to force the point into the earth, which a coil could not do; second, in case a ring should be broken it would not impair the operation of the rest of the filter, while if the coil should be broken at any point it would allow the whole to unwind and thus become useless; third, the rings are more easily and cheaply made, as they can be cast of malleable iron entirely finished for use.

The object of this invention is to afford a greater flow of water, and at the same time more effectually to exclude sand and dirt.

I claim—

1. The rings A A, having the parts e e attached, for the purpose described.
2. The combination of the rings A A and frame-work B B C D, substantially as described.

WM. A. SHARPE.

Witnesses:

W. A. C. SMITH,
J. H. PHILLIPS.