

Dutton & Maguire,

Well Tubing.

N^o 50343.

Patented Oct. 10, 1865.

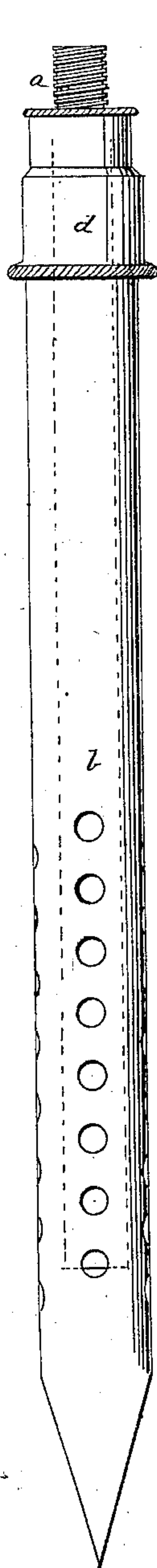


Fig. 1.

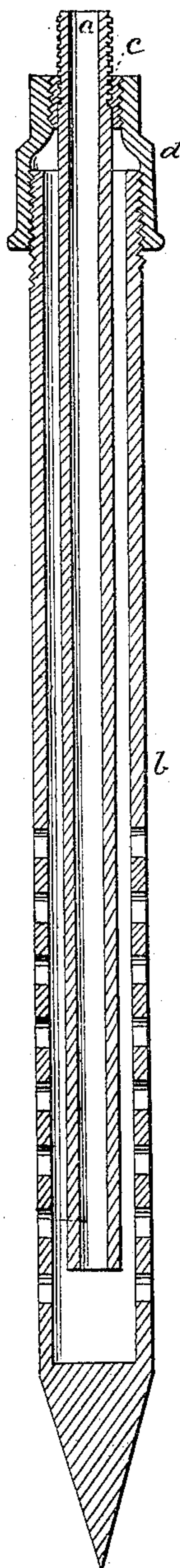


Fig. 2.

Witnesses:

T. Smith
S. Jones

Inventors:

Thomas Dutton
Thomas Maguire
by Atty. Thos. J. Emmett

UNITED STATES PATENT OFFICE.

THOMAS DUTTON AND THOMAS MAGUIRE, OF PORT JERVIS, NEW YORK.

IMPROVED PIPES OR TUBES FOR WELLS.

Specification forming part of Letters Patent No. 50,343, dated October 10, 1865.

To all whom it may concern:

Be it known that we, THOMAS DUTTON and THOMAS MAGUIRE, of Port Jervis, in the county of Orange and State of New York, have invented a certain new and useful Improvement on Pipes or Tubes for Wells; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters and marks thereon.

Our invention relates to that class or kind of tube or pipe now commonly used in connection with pumps for obtaining water or any other fluid, the passage for the tube through the soil or earth being made by a bar forcing such passage and making it of a diameter only sufficient for the passing down of the tube. Sometimes, of course, when the passage is to be made through rock or solid strata, boring-tools or drilling machinery will be used, and in some instances the forcing-bar or boring or drilling will be dispensed with, the pipe or tube being forced down through the soil or earth, and thus making its own track or passage.

The drawings forming part of this specification show a pipe or tube constructed under our invention, Figure 1 thereof being a view by elevation, and Fig. 2 being a view by longitudinal section.

In both of these figures, where like parts are shown, like marks and letters are used to indicate the parts.

By these drawings it will be seen that we use an internal tube, *a*, which is not perforated, and an exterior or external tube, *b*, which, to a greater or less extent, is perforated, the perforations being of such number, size, and shape as will best answer the particular locality or peculiarities of soil, earth, fluid, &c., upon or in which the well may be situated. The interior tube, *a*, is that to which the pumping apparatus will be attached. It is continuous

or perfect throughout its entire length, and extends down quite near to the bottom of the exterior tube. The exterior tube may continue for the entire length of the external tube, or it may be of limited length around the lower end of the interior tube. The two tubes are shown connected together by a collar, *c*, with screw-threads upon its inner and outer surfaces, the one fitting into like threads on the outer surface of the tube *a* and the other fitting into like threads on the inner surface of a binding or clamping collar, *d*, which collar *d*, by screw-threads, is also connected to the exterior tube, *b*. This manner of connecting the two tubes affords great conveniences for attaching or detaching the one to or from the other, as also for increasing or diminishing the extent of the use of the exterior tube. The exterior tube is pointed, which gives facilities for its being forced through the earth where the forcing-bar is dispensed with. In a well where other tubes had been used and the sand and gravel came up so freely that the packing of the pump was twice worn out in three days, our tubing in fifteen minutes gave clear water, and continued pumping remained free of sand and gravel. The improvement is, therefore, one having material practical advantages.

What we claim as our invention, and desire to secure by Letters Patent, is—

The well pipe or tube composed of the interior non-perforated and the exterior perforated tubes constructed and connected together substantially as described and herein set forth.

This specification signed this 6th day of September, 1865.

THOMAS DUTTON.
THOMAS MAGUIRE.

Witnesses:

L. F. HOUGH,
F. MARVIN.