

J. Hutchins,

Well Tubing,

N^o 59,608.

Patented Nov. 13, 1866.

Fig: 2

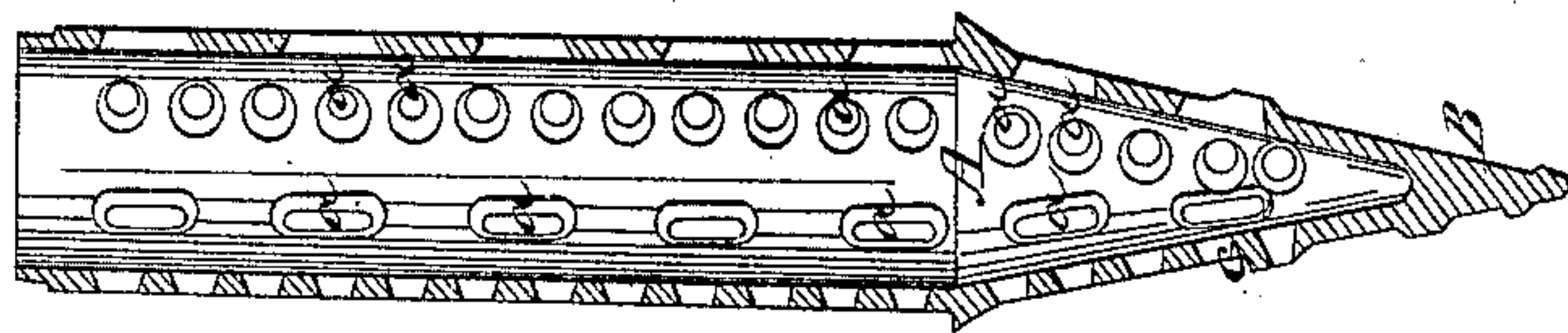
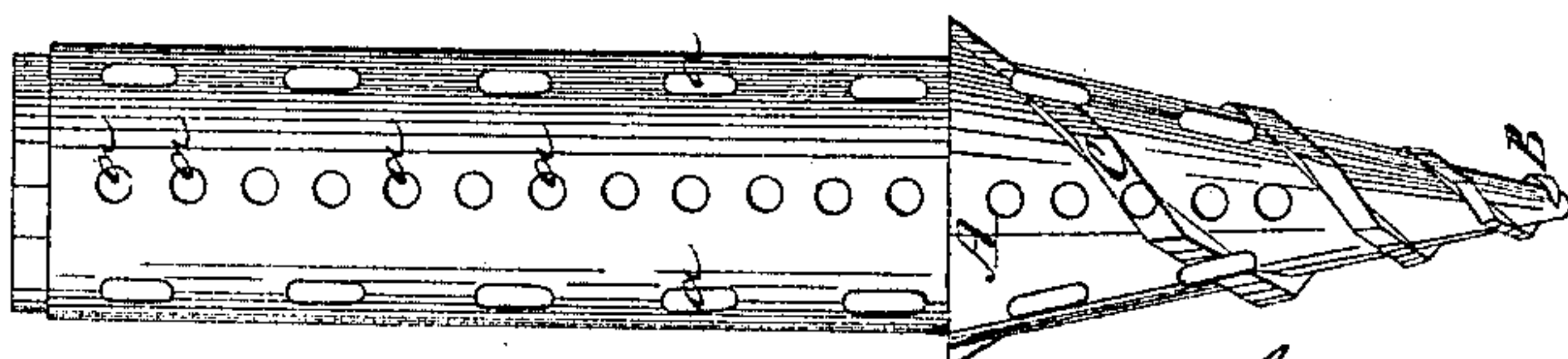


Fig: 1



Witnesses

A. S. Seaman
W. Clayton

Inventor

John Hutchins

by atty

J. C. Clayton

UNITED STATES PATENT OFFICE.

JOHN HUTCHINS, OF ELMIRA, NEW YORK.

IMPROVED DRILL OR WELL TUBE.

Specification forming part of Letters Patent No. 59,608, dated November 13, 1866.

To all whom it may concern:

Be it known that I, JOHN HUTCHINS, of Elmira, in the county of Chemung, and in the State of New York, have invented a certain new and useful Instrument for Sinking Hydrants; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification.

In the drawings, Figure 1 is a side elevation, and Fig. 2 is a vertical section.

My invention consists in the peculiar construction of an instrument to be used in sinking hydrants, as hereinafter more fully appears.

A represents a hollow cylindro-conical drill-point made of cast-iron of a size proportioned to the hydrant or pump to be used. For a three-inch hydrant, pump, or well, I make use of a drill-point, A, of a little more than three inches in diameter and about two feet long, of the shape shown in drawings, or conical from base to point. The point B is for an inch or more cast solid, so that it may not be easily crushed. *a a* are a number of conical holes or slots through the sides for the admission of the water. These openings, whether circular or of other shape, are made larger inside of the cylinder than at their outer surface, (see Fig. 2,) so that any obstruction which can get from the outside into the hole can escape through the hole into the tube and thence be discharged. *c* is a flat spiral thread winding two or three times around the point. This thread is flattened or planed off, as shown in drawings, so as to leave the thread only at or near the angles where two of the thread-planes meet. In making the pattern the

thread would be left as usual, and then be planed off hexagonally, so that an end view of the thread would disclose a hexagon.

The best and cheapest mode of making the instruments is to cast them of one piece of iron.

In operating my invention, I first select a suitable place for the hydrant, and then begin to drive down the drill-point with a sledge. After it is driven below the ground surface a follower is applied, and that receives and transmits the blow. For small bores a sledge will answer; but if the ground be hard, a light pile-driver best answers the purpose. By applying a wrench or lever the drill-point can be turned occasionally, so as to act as a screw, and thereby facilitate the operation. When the water is reached the pipes can be put in place resting upon the instrument, which is left in the bottom of the hole, and any desired pump can be applied.

I am aware that wells, &c., have been heretofore made by driving tubes into the ground, and hence I do not claim that mode of making wells as new.

I claim—

The hollow conical drill-point A, of cast-iron, provided with beveled holes or slots *a*, with the spiral flange *c*, flattened as described, the whole being constructed as described, and for the purposes set forth.

In testimony that I claim the above-described invention I have hereunto signed my name this 6th day of July, 1866.

JOHN HUTCHINS.

Witnesses:

DEWITT C. TENNY,
JO. C. CLAYTON.