

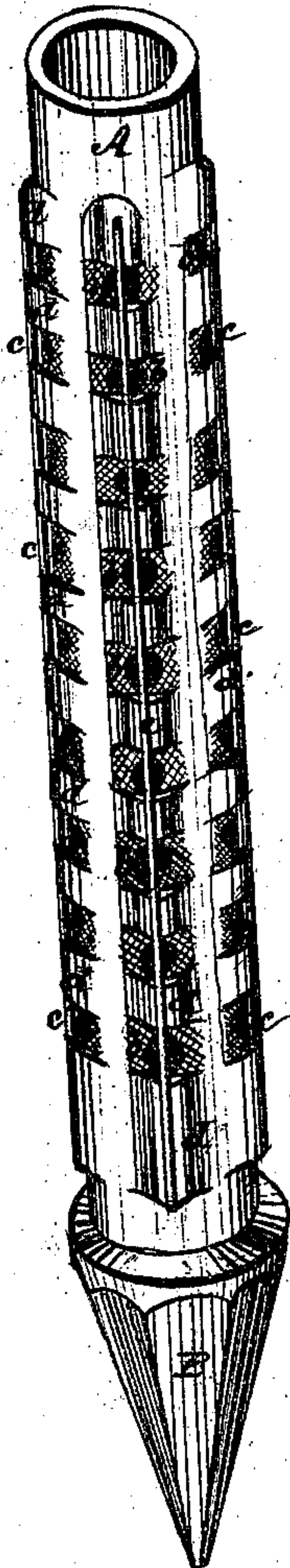
*Macomber & Whelpley,*

*Well Tube Strainer.*

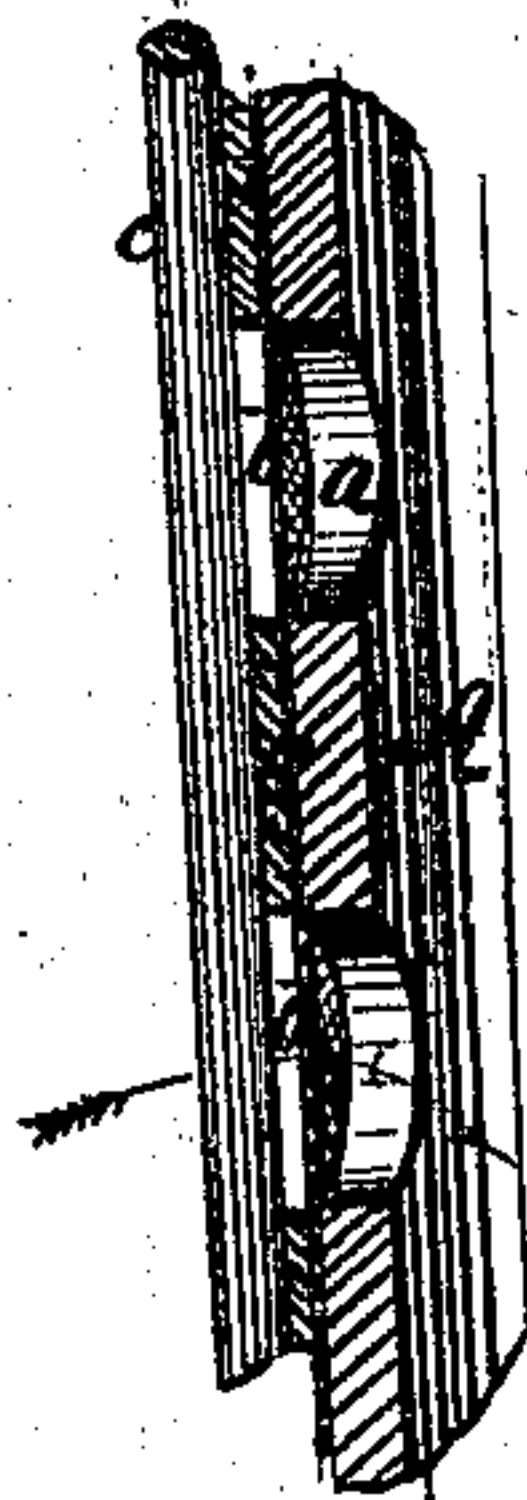
*Patented Mar. 1. 1870.*

*No. 100,426.*

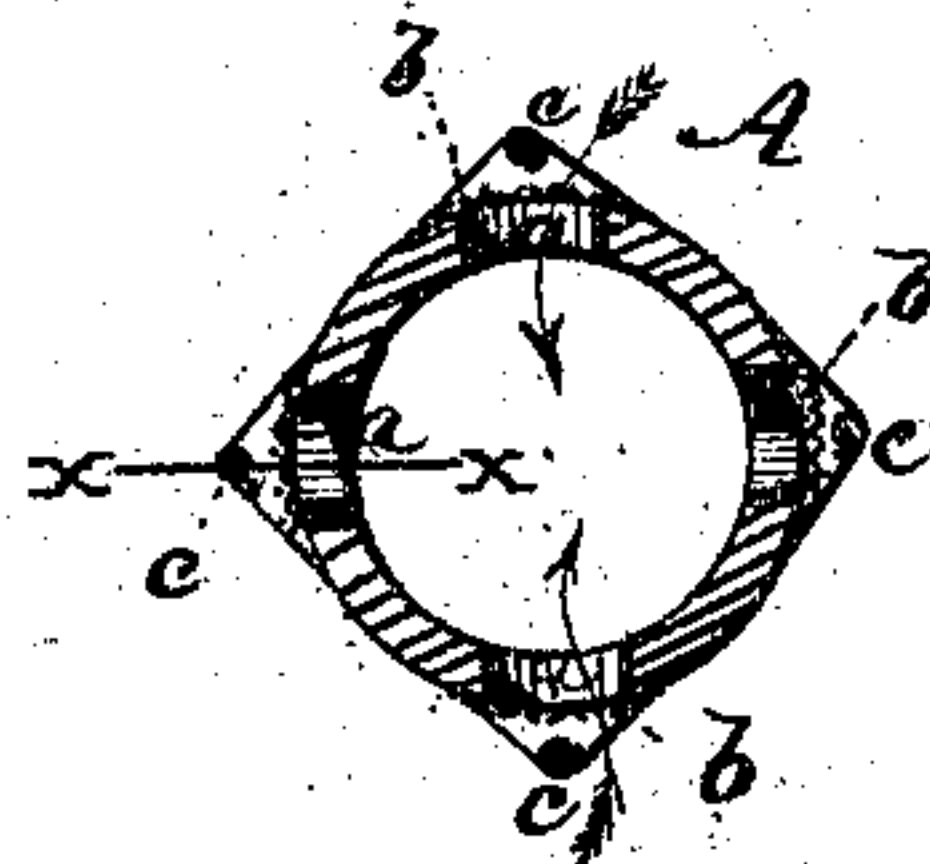
*Fig. 1.*



*Fig. 3.*



*Fig. 2.*



*Witnesses,*  
*Phil. T. Dodge,*  
*Wm. Goughborough*

*C. E. Macomber &*  
*C. E. Whelpley* *Inventors*  
*by Dodge & Munn*  
*Their Atty.*

# United States Patent Office.

CHARLES E. MACOMBER AND CORYDON E. WHELPLEY, OF MINNEAPOLIS,  
MINNESOTA.

*Letters Patent No. 100,426, dated March 1, 1870.*

## IMPROVEMENT IN DRIVEN-WELL STRAINERS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that we, CHARLES E. MACOMBER and CORYDON E. WHELPLEY, of Minneapolis, in the county of Hennepin, and State of Minnesota, have invented certain new and useful Improvements in Tubes for Driven Wells; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use our invention, we will proceed to describe it.

Our invention relates to tubes for "drive wells," and

It consists in a novel manner of applying a strainer to the perforated end of the same, and in providing this strainer with a wire or guard to protect it from being torn or punctured by gravel, &c.

In the drawing—

Figure 1 is a perspective view of our tube;

Figure 2 is a cross-section of the same; and

Figure 3 is a vertical section of a part of the same, taken on the line *xx* of fig. 2,

A is the tube, having secured to its lower end the tapering point B, as shown in fig. 1.

This point B is of a diameter greater than the tube A, and is formed with several faces, leaving at their intersection sharp edges, as shown.

Through the tube A we make several rows of small holes, *a*, and over each row of holes, on the outside of the tube, we lay a strip of wire-gauze, *b*, and solder or braze it to the tube, as shown in figs. 1, 2, and 3.

Over each strip of gauze *b*, opposite the centers of the holes, we place a wire, *c*, and solder it firmly in place, as shown at *d d*, care being taken that the solder does not get into and obstruct the holes *a*.

When the tube thus constructed is forced or driven into the earth, the wire *c* serves as an effectual guard or protection for the gauze, and prevents it from being broken or torn by gravel, but at the same time does not prevent the free passage of water through the holes *a* into the pipe.

In this manner we produce a strong, cheap, and effective strainer, which, although placed on the outside of the tube, is not liable to be destroyed like those heretofore made in that manner, and which does not obstruct the tubes like those placed on the inside.

The gauze should be soldered fast, not only along its edges between the holes *a*, and the guard-wires *c* should also be soldered at the ends and between the holes, as represented in fig. 1, so as to secure all firmly in place, and prevent their being displaced as the tube is forced into the ground.

Having thus described our invention,

What we claim, is—

A strainer-tube for wells, consisting of the perforated tube A, with the wire-gauze *b* and the guard-wires *c* applied thereto, in the manner herein described.

CHARLES E. MACOMBER.

CORYDON E. WHELPLEY.

Witnesses:

DAVID MORGAN,

JOHN VANDERWURKER.