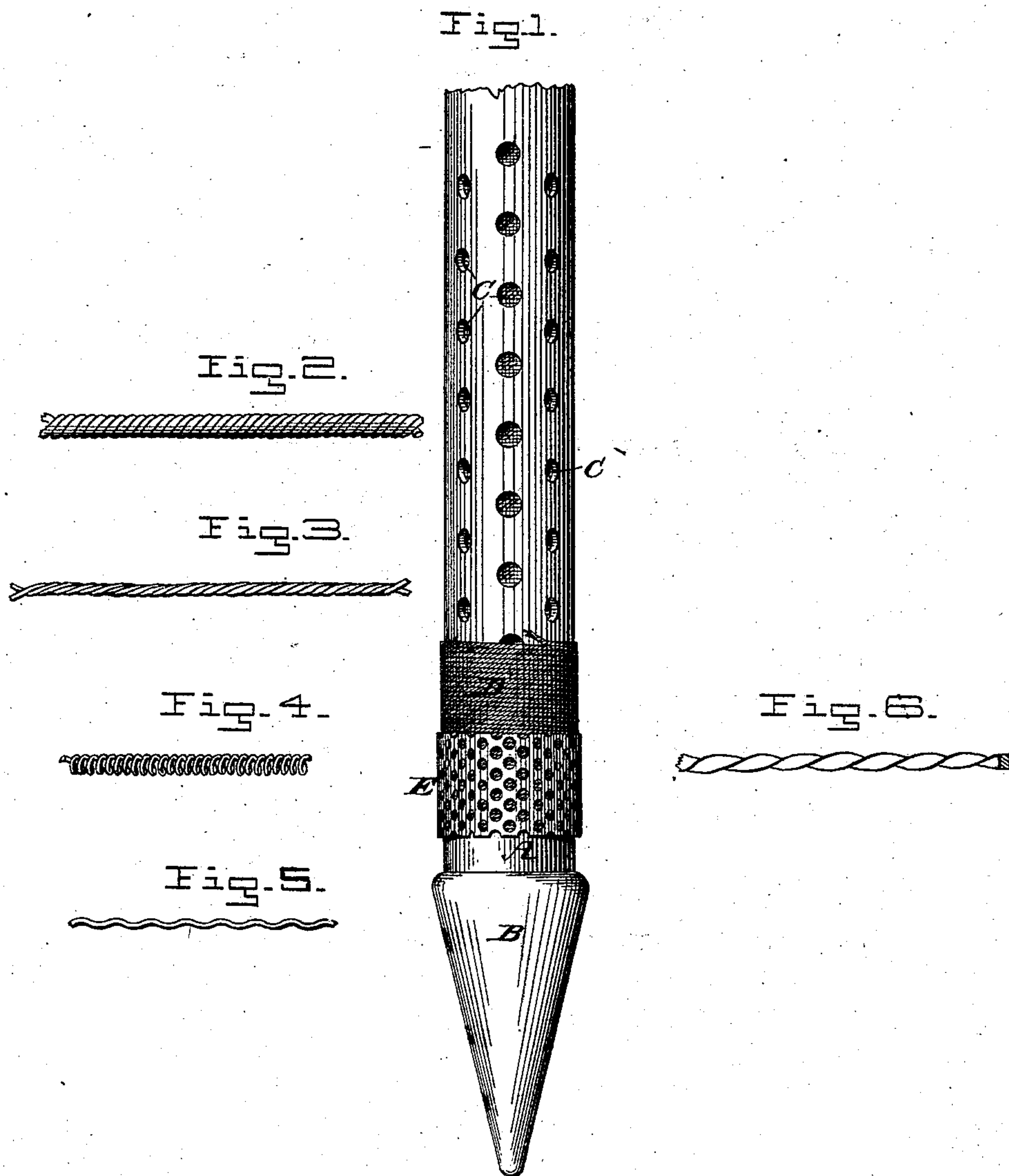


(No Model.)

O. B. OLMSTED.
DRIVE WELL POINT.

No. 287,708.

Patented Oct. 30, 1883.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

OSCAR B. OLMSTED, OF CHICAGO, ILLINOIS.

DRIVE-WELL POINT.

SPECIFICATION forming part of Letters Patent No. 287,708, dated October 30, 1883.

Application filed June 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, OSCAR B. OLMSTED, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented new and useful Improvements in Drive-Well Points, of which the following is a specification.

My invention consists in a well-tube strainer formed by winding wire cord about a perforated pipe, the narrow openings between adjoining coils affording proper inlet for water, and the wires themselves preventing the entrance of sand, gravel, or other foreign matters into the pipe.

In the annexed drawings, Figure 1 represents a side view of my improved point partially covered, and Figs. 2 to 6 views illustrating modifications of the covering-wire.

I would here call attention to the fact that in a former patent granted to me on the 8th day of August, 1882, and numbered 262,462, a heavy wire was spirally coiled about a core composed of a series of radial wings united at their inner edges, the wire in that instance serving to form the cylindrical body for the well-point, and the wide spaces designedly left between adjoining coils serving the purpose of the holes or perforations made in the pipe when a pipe is used to form the point; and I wish to point out the distinction between such former construction and the present one, that in the first the wire served merely as a support for the customary wire-gauze covering, while in the present instance the wire forms the strainer, and is too light to add strength or stiffness to the point.

In practice I prefer to employ fine wire, and to twist, braid, or plait together two or more strands after the manner of the well-known picture wire or cord, the wire or cord being then laid about the perforated point, advisably in a continuous spiral, each coil laid close against the preceding, so that when finished the winding presents the appearance of a continuous envelope or wrapper. The twisted or plaited wire is preferred for the reason that the water is permitted to pass between the individual strands of each coil or turn of the wire cord, as well as between adjoining coils; but the wire may be composed of a bunch of strands, (as in Fig. 2,) of merely two strands, (as in Fig. 3,) of a single strand

twisted, (as in Fig. 4,) a polygonal wire twisted, (as in Fig. 6,) or even a plain wire, which latter should, however, be somewhat loose, and is not deemed so advantageous as the twisted wire in point of efficiency, though perhaps a trifle cheaper.

Referring now to Fig. 1, the construction will be readily understood. A represents the lower end of the well-tube, which in practice is either closed by a plug or furnished with a metal point, B, to facilitate its entrance into the ground. The lower end of the pipe is provided with numerous perforations, C, usually from one-quarter to one-third of an inch in diameter, or with slits of about the same width, and the wire covering D is wound continuously around the pipe from a point above the perforations to a point below the same, as shown.

For very firm soil or soil containing stones or gravel it will be found advantageous to employ an outer covering, E, of perforated sheet metal to protect the wire covering, the sheet metal extending over the entire wire-covered surface. For soft soil this may be omitted.

In practice it is found that the spaces between the wire strands afford ample inlet for water, while the wires are strong enough to withstand the strain and wear to which they are subjected, and do not, therefore, become readily injured, as frequently happens with the ordinary wire-gauze.

I do not claim, broadly, a well-tube point having a strainer formed by winding wire about its exterior; and I am also aware that a well-tube has been wound with a coarse wire, which in turn had wound about it a fine wire, and such construction I do not claim; but,

Having thus described my invention, what I claim is—

1. The herein-described well-tube strainer, consisting of perforated tube A, wire coil D, and perforated sheet-metal covering E, all substantially as shown and described.

2. In a well-tube strainer, the combination, with a perforated tube, of a wire cord wound about said tube, substantially as shown and described.

O. B. OLMSTED.

Witnesses:

THO. L. FORREST,
GEO. P. BENTON.