

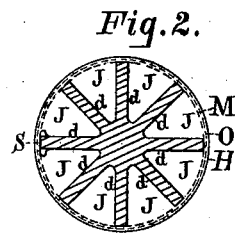
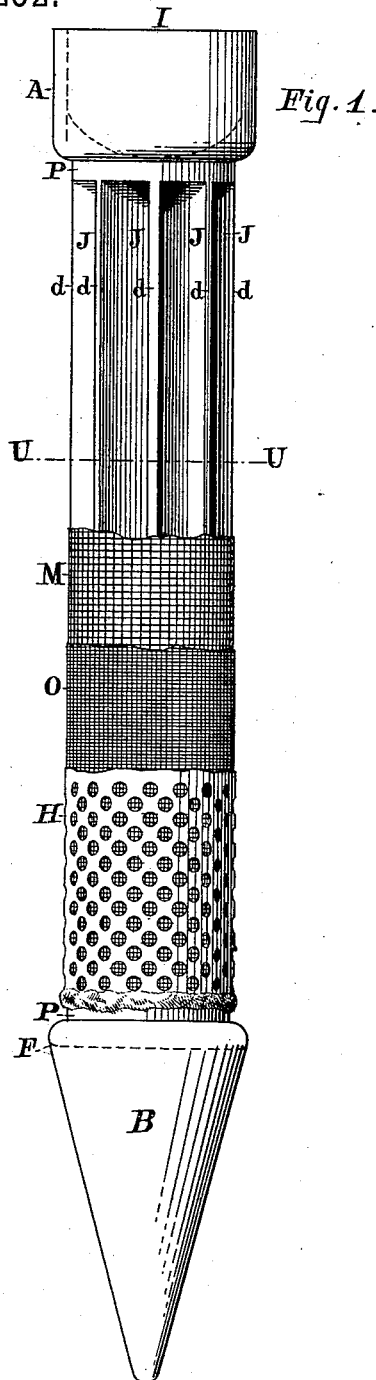
(No Model.)

O. B. OLMSTED.

DRIVE WELL POINT OR STRAINER.

No. 261,252.

Patented July 18, 1882.



Witnesses:
A. Aldrich.
Fred Meyer

Inventor:
O. B. Olmsted

UNITED STATES PATENT OFFICE.

OSCAR B. OLMSTED, OF BELOIT, WISCONSIN.

DRIVE-WELL POINT OR STRAINER.

SPECIFICATION forming part of Letters Patent No. 261,252, dated July 18, 1882.

Application filed May 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, OSCAR B. OLMSTED, a citizen of the United States, residing at Beloit, county of Rock, and State of Wisconsin, have invented new and useful Improvements in Drive-Well Points or Strainers, of which the following is a specification.

My invention relates to improvements in drive-well points or strainers, in which I use a radiating web instead of the ordinary tube; and the objects of my invention are, first, to obtain greater strength to withstand the strain in driving them into the ground when necessary to drive them; second, to get a greater amount of water surface and capacity; and, third, to economize in the cost of manufacture. I attain these objects by the device illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the point or strainer with a portion of the covering cut away to show the radiating web and water-channels, and Fig. 2 is a cross-section of the radiating web at the dotted lines *u u*, Fig. 1.

Similar letters refer to like parts in the different views.

The radiating web, as shown in Fig. 2, has eight arms, (indicated by the letters *d*.) and some of them are shown in Fig. 1, and also indicated by letters *d*. These radiating arms form a body or frame-work, around which the coverings M, O, and H, Figs. 1 and 2, are fastened, and the channels between the arms (indicated by letters J in Fig. 1 and J' in Fig. 2) are for the passage of water out through the coupling-ring A and opening I.

Fig. 2 shows a web with eight radiating arms; but they may be made with less than eight arms, or with more than eight, as the different sizes may require. The web is here shown in Fig. 1 with a coupling-ring, A, at one end and a tapering point, B, at the opposite end, and with a ring or band at each end of the web P P next to the point B and ring A.

I prefer to make the radiating web, with the ring A and taper point B and rings P P, of malleable iron, all cast in one piece; but the whole may be made of gray cast-iron, or of wood and iron, or of any other suitable material in different parts and then bolted or fastened together.

When these points or strainers are to be used without driving them the tapering point

B can be dispensed with and that end of the web covered in any suitable manner, as shown at dotted line F.

In Figs. 1 and 2 the web is shown with a covering, M M, of coarse wire-cloth. Outside of that covering is one of fine strainer-cloth or wire-gauze, O, Figs. 1 and 2, and outside of the strainer-cloth is a covering of perforated metal, H H, or other suitable material for protecting the strainer-cloth. The coarse covering M helps to support the finer strainer, O, and resist the pressure from the outside. One of the radiating arms is enlarged at its outer surface its entire length, as shown at S, Fig. 2. This enlargement of one of the arms and the rings P P, Fig. 1, furnish suitable surfaces for soldering on or otherwise fastening the strainer and other coverings. When all of the three coverings M, O, and H, Figs. 1 and 2, are not needed, one or two of them may be dispensed with.

Heretofore strainers and drive-well points have been made by using iron pipe or other hollow tubes, and drilling or punching, or in some other way forming numerous holes for admitting the water, and casting or fastening a tapering point of some kind to one end, and, when necessary, covering such tube with suitable wire-gauze and a perforated metal covering outside the gauze. In such points or strainers, if sufficient holes are drilled or made in the tube to admit a good supply of water, the tube would be cut away and weakened, so that it would be liable to break in driving into the ground, and to avoid weakening the tube a long tube, and consequently long strainer-covering, is necessary to get sufficient water-openings, thereby making them expensive.

By the use of my radiating web I use the material in a shape that gives the greatest strength and also leaves almost the entire surface under the strainer-covering unobstructed for the water to pass through. By this device I also avoid the expense of drilling holes for letting in the water.

I am aware that a tube corrugated on its exterior has been placed within a strainer-point for well-tubes, and this I do not claim.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a well-tube strainer, a central web or

spider having radial wings, substantially as and for the purpose set forth.

2. An internal support for well-tube strainers, consisting of a series of wings united at their inner edges and radiating from the point of union, closed at the lower end, and provided with a coupling-ring at the upper end, substantially as shown.

3. A support or core for well-tube strainers, consisting of a series of radial wings meeting at their inner edges, one of said wings being enlarged on its outer edge, substantially as shown and described, to permit the firm attachment of the outer covering.

4. In a well-tube strainer, the combination of a core or web consisting of a series of radiating wings meeting at the center, and a strainer-

covering surrounding said core, substantially as shown.

5. In combination with the core or support consisting of radial wings meeting at their inner edges, the wire-gauze covering O and perforated metal covering H, applied substantially as shown.

6. The herein-described strainer core or support for drive-well tubes, consisting of a series of radial wings united at the center and provided with a tapering point at its lower end and a coupling-ring at its upper end.

OSCAR B. OLMSTED.

Witnesses:

J. B. DOW,
W. P. GRAY.