(No Model.)

A. D. COOK.

POINT OR STRAINER FOR DRIVE WELLS.

No. 304,617. Patented Sept. 2, 1884.

Fig. 1.

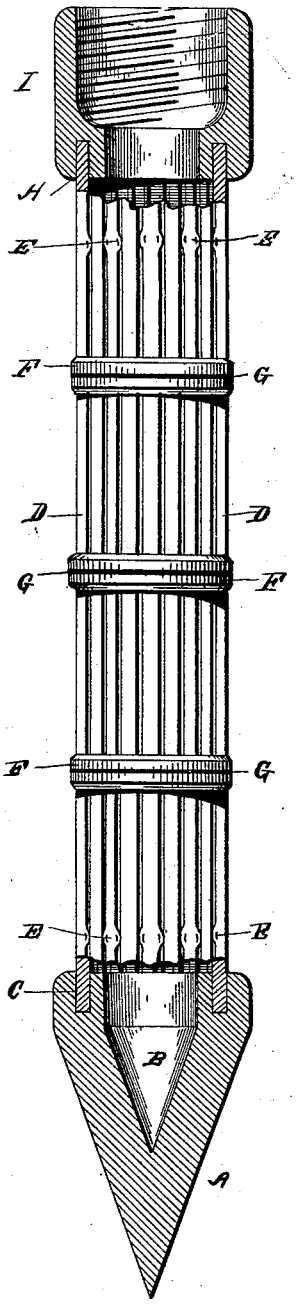
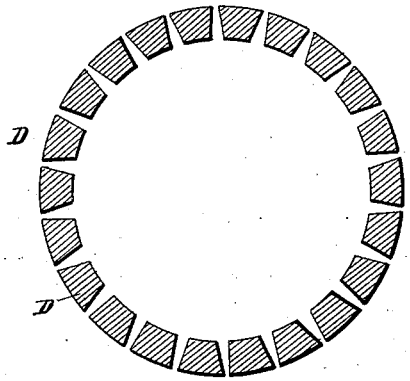


Fig. 2.



WITNESSES

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AUGUST D. COOK, OF LAWRENCEBURG, INDIANA.

POINT OR STRAINER FOR DRIVE-WELLS.

SPECIFICATION forming part of Letters Patent No. 304,617, dated September 2, 1884.

Application filed May 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, AUGUST D. COOK, a citizen of the United States, residing at Lawrenceburg, in the county of Dearborn and State of Indiana, have invented certain new and useful Improvements in Points or Strainers for Drive-Wells, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain improvements in well points and strainers, and is designed to simplify the construction of driven-well points, forming the walls of the strainer sufficiently strong, without multiplying the parts, to stand the "driving" strain.

In more fully describing the device, reference will be made to the accompanying drawings, in which—

Figure 1 represents an elevation of the strainer, the "point" and the connecting-collar being in section; and Fig. 2, an enlarged section through the strainer, showing the peculiar shape of the rods forming the same.

A represents the point of the tube, being adapted by its conical shape to pierce the ground into which it may be driven, and is provided with the internal recess, B, which saves material and weight, without materially affecting the strength of the said point. In the upper or larger end of the point is an annular recess or groove, C, into which is received the lower end of the strainer. The strainer is cylindrical in form, and is composed of rods trapezoidal in cross-section, and designated in the drawings by the letter D. Near each end of each alternate rod is struck up on each side of the said rod a lug or projection, E, which serves the purpose of keeping the rods slightly separated when in position. The separation of the rods allows the water to percolate through the walls of the strainer and thoroughly prevent the passage of any solid matter—such as sand, small gravel, or dirt—in fact, thoroughly "straining" the water. The shape of the rods—trapezoidal—is an important factor in the strainer, by allowing variation in the number used, and therefore the diameter of the said strainer, without altering the size of the said rods. At equidistant points on the outside of the strainer are the rings F, for preventing the rods spreading under pressure. Each of the rings are double, being secured together and also to the rods of the strainer by a ring of solder, G, between the two parts of the ring, the outer edges of which are beveled. The purpose of the soldering, as described, is to prevent any of the said solder running into and clogging the spaces between the rods on each side the said rings. The top of the strainer is adapted to enter and to be secured in an annular groove, H, in the lower side of the collar I. The collar has its upper internal surface screw-threaded to receive the end of the well-tube. All the parts are preferably secured by solder, and the material used in construction preferably brass. The operation is simple and easily understood from the above description of the device.

It is well known that many well-point strainers have been invented and used; but all are more or less complex in construction. Some have a perforated tube to give strength, and an outer covering of wire to strain the water. Others have longitudinally-extended round wires, with an inner sieve, but adapted to be placed only after the hole has been made, thus requiring an extra driving-point, and so on.

In the device above described in the specification the point is strong and light, and the strainer is exceedingly simple in construction, yet has sufficient strength to stand being driven into the hardest earth; and, again, there being no complication of parts, the strainer and the strengthening-tube being one and the same, and being formed of brass, it is practically indestructible by the action of the water or other causes.

Having described the device, what I claim is—

1. The trapezoidal rods forming the strainer, secured to suitable retaining devices, substantially as described.

2. The trapezoidal rods forming the strainer, the alternate ones having on each side, top and bottom, lugs struck up on them, the said rods being properly seated and secured, substantially as described.

3. The conical point or head having an internal recess and an annular groove, in com-

bination with the trapezoidal rods seated therein, the parts being adapted to operate substantially as and for the purpose specified.

4. The conical, recessed, and grooved head, the screw-threaded and grooved collar, and the trapezoidal rods, the alternate ones having on each side lugs, top and bottom, the said rods being bound together and prevented from spreading by rings, the whole forming a well point and strainer, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

AUGUST D. COOK.

Witnesses:
CHARLES L. SKINNER,
JOHN ENCHESS.