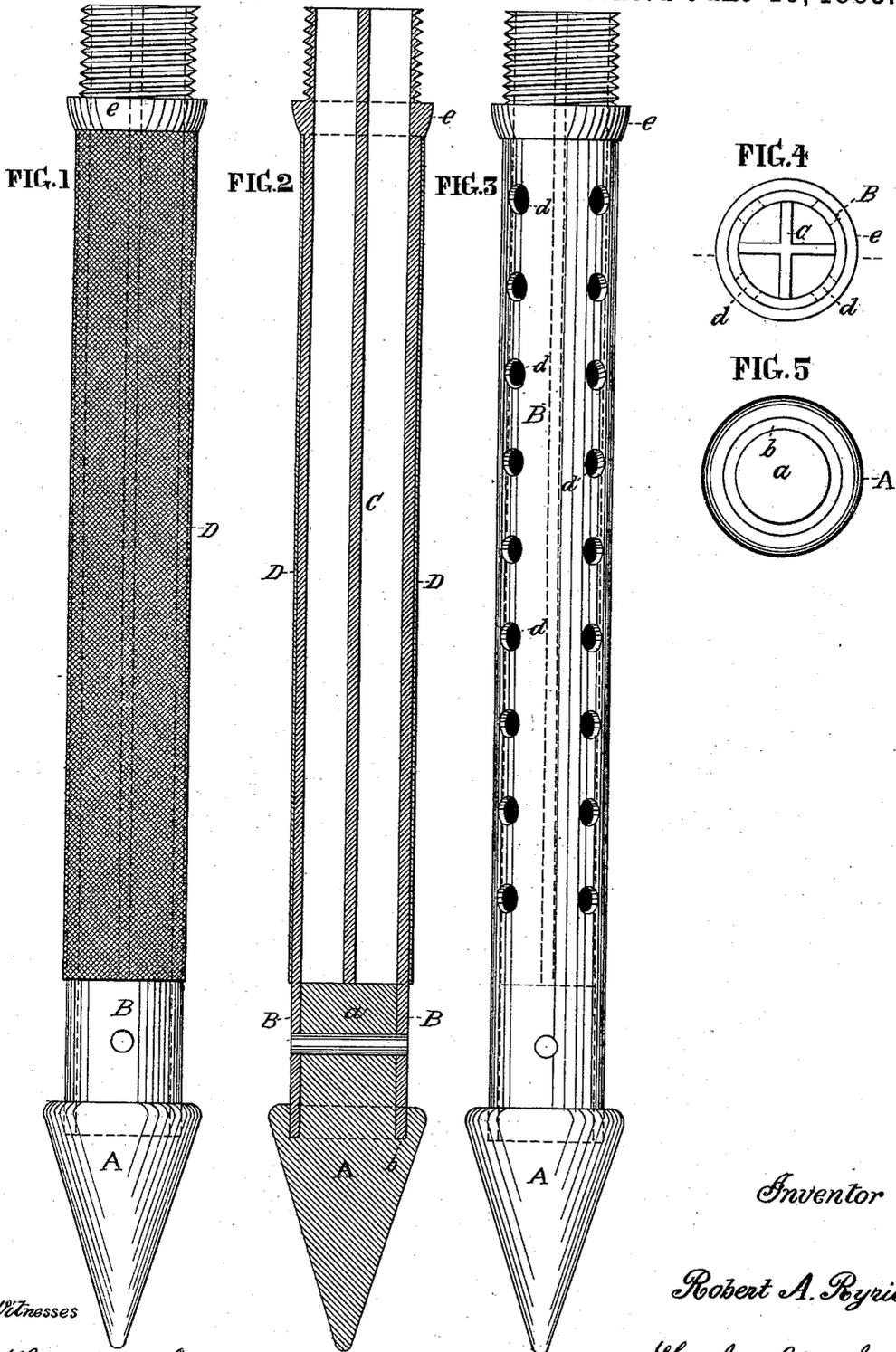


(No Model.)

R. A. RYRIE.  
DRIVE WELL POINT.

No. 279,600.

Patented June 19, 1883.



Witnesses

Thomas J. Bewley  
B. M. Smith

Inventor

Robert A. Ryrie.

per Stephen Utich. atty

# UNITED STATES PATENT OFFICE.

ROBERT A. RYRIE, OF CAMDEN, NEW JERSEY, ASSIGNOR OF ONE-HALF TO  
HERMAN C. BURRICHTER, OF SAME PLACE.

## DRIVE-WELL POINT.

SPECIFICATION forming part of Letters Patent No. 279,600, dated June 19, 1883.

Application filed February 21, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT A. RYRIE, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented a new and useful Improvement in Drive-Well Points, of which the following is a specification.

My invention consists of the tube of a drive-well point having a core, and an enlargement at the upper end of the tube to form a shoulder, (to take the strain off the screw-threads connecting with the next joint,) all made in a single piece of casting, in combination with a detachable point having an annular groove for the connection of the lower end of the tube, substantially as described in the body of the specification and set forth in the claim.

In the accompanying drawings, which make a part of this specification, Figure 1 is a side elevation of the improved drive-well point incased with wire-gauze. Fig. 2 is a vertical section of the same. Fig. 3 is a side elevation with the wire-gauze covering removed. Fig. 4 is an end view of the tube B. Fig. 5 is a top view of the cast-iron point A.

Like letters of reference in all the figures indicate the same parts.

A represents the cast-iron point, and B a tube constructed of brass or other non-corrosive metal, which are connected together by means of the plug portion *a* of the point A, and secured by means of a rivet, and also by means of the annular groove *b*, down into which the tube extends. The inner and outer circumferential surfaces of the groove fit closely against the corresponding surfaces of the tube, and prevent the crushing and spreading of the end of said tube while being driven into the earth.

In order to strengthen the tube B and lessen the liability to injury resulting from the force

employed in driving, I cast a core, C, in said tube, which in the drawings is made cruciform, representing four longitudinal openings in the tube for the passage of water that is drawn in through the inlet-openings *d* in the wall of the tube. The form of the core may be varied, if desired, to suit different sizes of tube. The lower end of the core rests against the upper flat surface of the plug portion *a* of the cast-iron point A. The upper end of the tube portion B is provided with a shoulder, *e*, against which the lower end of the succeeding joint fits by a screw-threaded connection, and prevents any stripping or jamming of said screw-threads while the tube is being driven into the earth. This shoulder is tapered at its lower edge to decrease the resistance of the surrounding earth to the downward passage of the tube.

D is the wire-gauze covering seen in Figs. 1 and 2, which acts as a screen to prevent the passage of any extraneous matter through the inlet-openings *d* into the body of the tube.

I do not claim, broadly, a drive-well point having the tube and a core cast in a single piece; nor do I claim, broadly, the detachable point A, as these features exist in other inventions.

I claim as my invention—

In a drive-well point, the tube B, having a core, C, and a shoulder or enlargement, *e*, (all forming a single piece of casting,) in combination with the detachable point A, having an annular groove, *b*, for the reception of the lower end of the tube, substantially in the manner and for the purpose set forth.

ROBERT A. RYRIE.

Witnesses:

THOMAS J. BEWLEY,  
STEPHEN USTICK.