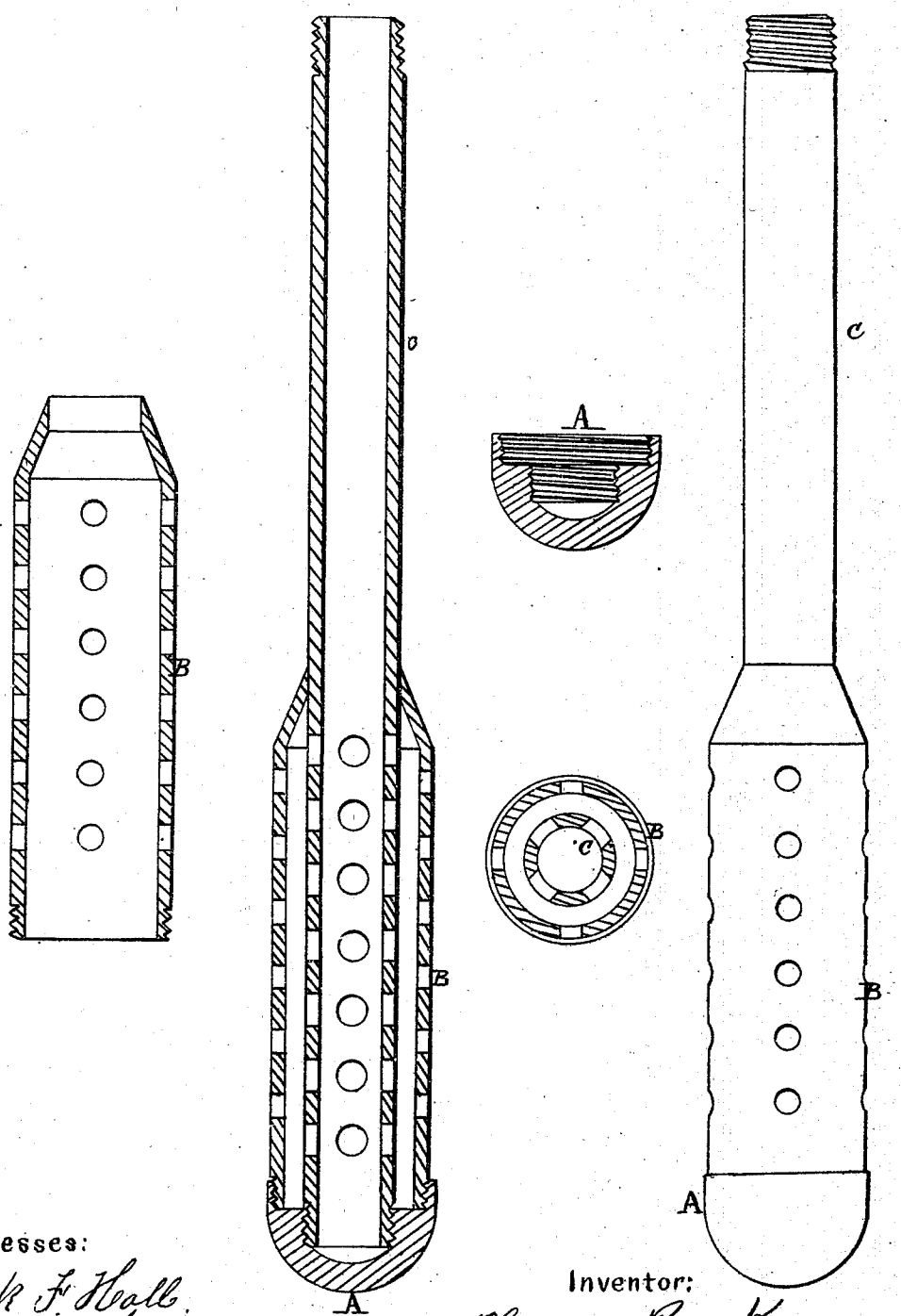
No. 49,418. PATENTED AUG. 15, 1865.

H. R. KOON.

DEEP WELL TUBE.



Witnesses:

Clark F. Hall.

Nelson Tracy

Inventor:

Henry R. Koon

THE NORRIS PETERS CO. PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HENRY R. KOON, OF PITTSFIELD, MASSACHUSETTS.

IMPROVEMENT IN DEEP-WELL TUBES.

Specification forming part of Letters Patent No. **49,418**, dated August 15, 1865.

To all whom it may concern:

Be it known that I, HENRY R. KOON, of Pittsfield, in the county of Berkshire and State of Massachusetts, have invented and made a certain new and useful Improvement in Wells; and I do hereby declare the following to be a full, clear, and exact description of my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is an elevation of my said improved well-tube. Fig. 2 is a vertical section of the same. Fig. 3 is a detached vertical section of the external case. Fig. 4 is a detached section of the shoe or cap at the lower end; and Fig. 5 is a sectional plan of the tube and external case.

Similar letters denote the same parts.

Artesian and other wells formed by or lined with a metal tube perforated near its lower end are well known.

The nature of my said invention consists in an exterior perforated case combined with the interior perforated pipe by means of a shoe-piece that sits upon the lower end of the said perforated pipe and receives the lower end of said casing, the object being to increase the area of the perforated surface against the earth without enlarging the well-tube, thereby giving greater space for water to enter the well; and I form the perforations in the exterior case smaller than those in the tube, in order that the perforations in the tube may not become obstructed.

In the drawings, C is the well-tube, formed of a metallic pipe or sections of pipe screwed or united together. The lower portion of this pipe is perforated through the sides a suitable distance with holes, as represented.

A screw is formed at the lower end of the well-tube, by means of which a shoe-piece, A, is attached, and to which shoe-piece A the casing B is screwed. This casing B is perforated with any desired number of holes, and they should each be smaller than the holes in the tube C, in order that any substance that might pass through the perforations in B shall be able to pass into the tube C and be drawn up with the water.

What I claim, and desire to secure by Letters Patent, is—

The perforated casing B, in combination with the shoe A and perforated well-tube C, as and for the purposes specified.

In witness whereof I have hereunto set my signature.

HENRY R. KOON.

Witnesses:
LEMUEL W. SERRELL,
JAS. E. SERRELL, Jr.