

No. 764,664.

PATENTED JULY 12, 1904.

J. O. JONES.

HYDRAULIC WELL DRILL.

APPLICATION FILED MAR. 28, 1903. RENEWED MAR. 10, 1904.

NO MODEL.

Fig. 1.

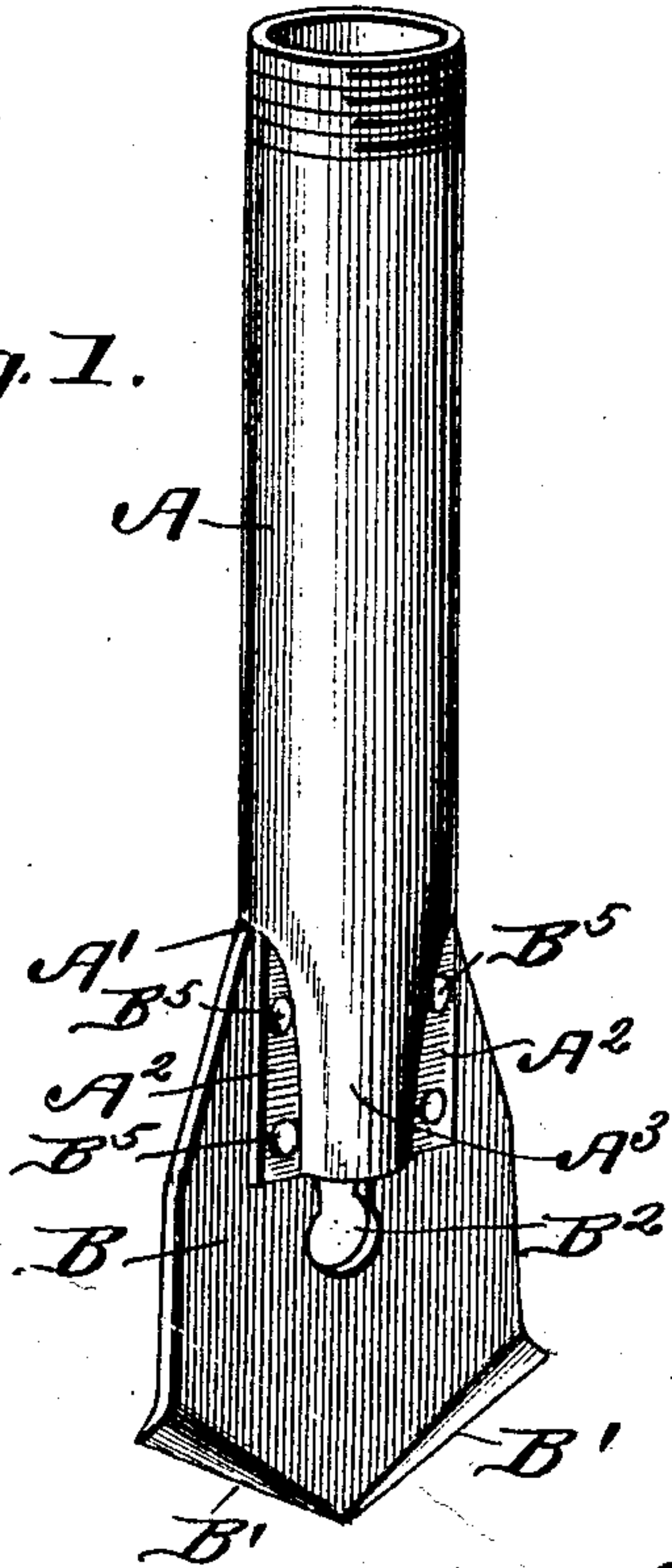


Fig. 2.

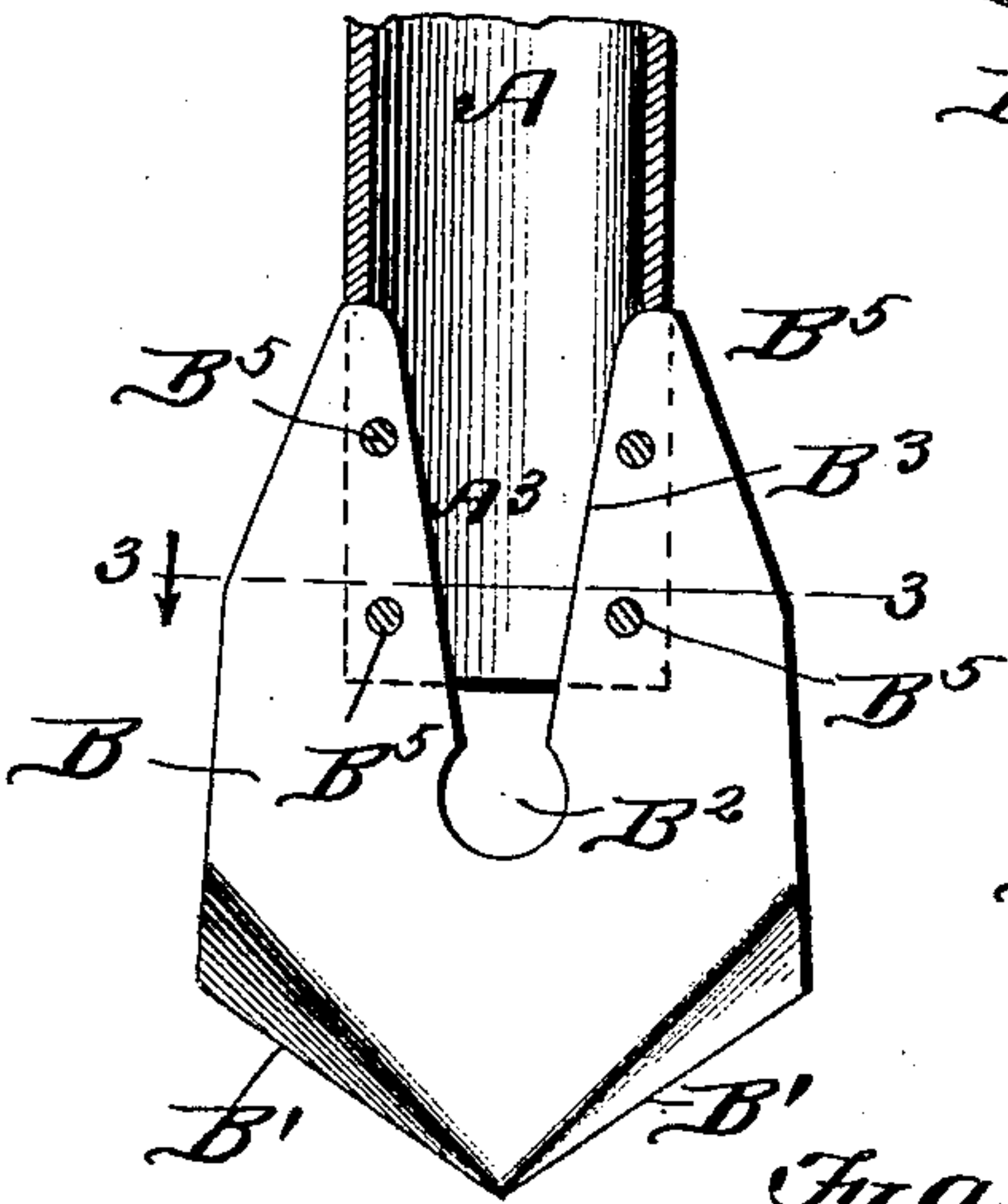


Fig. 4.

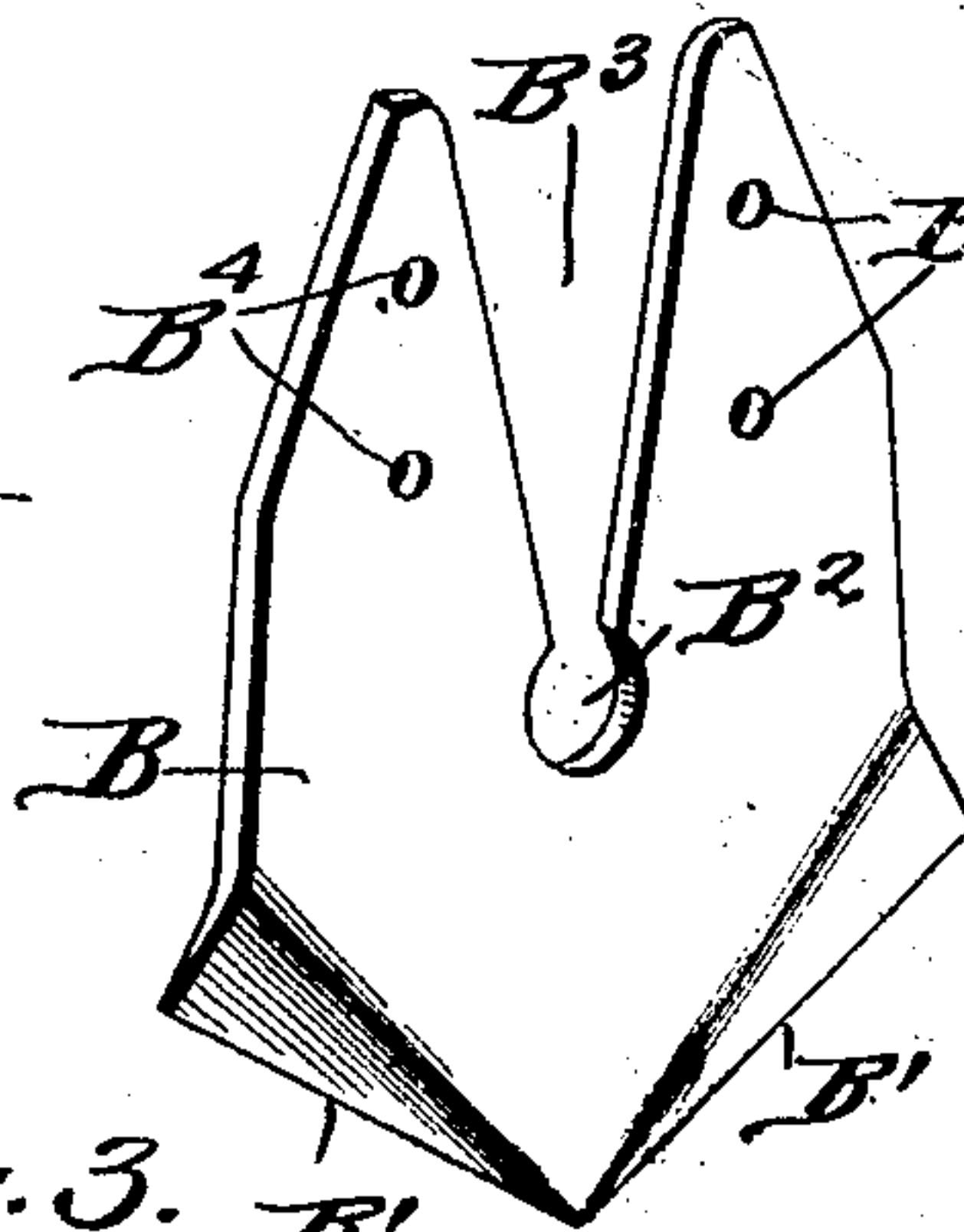


Fig. 5.

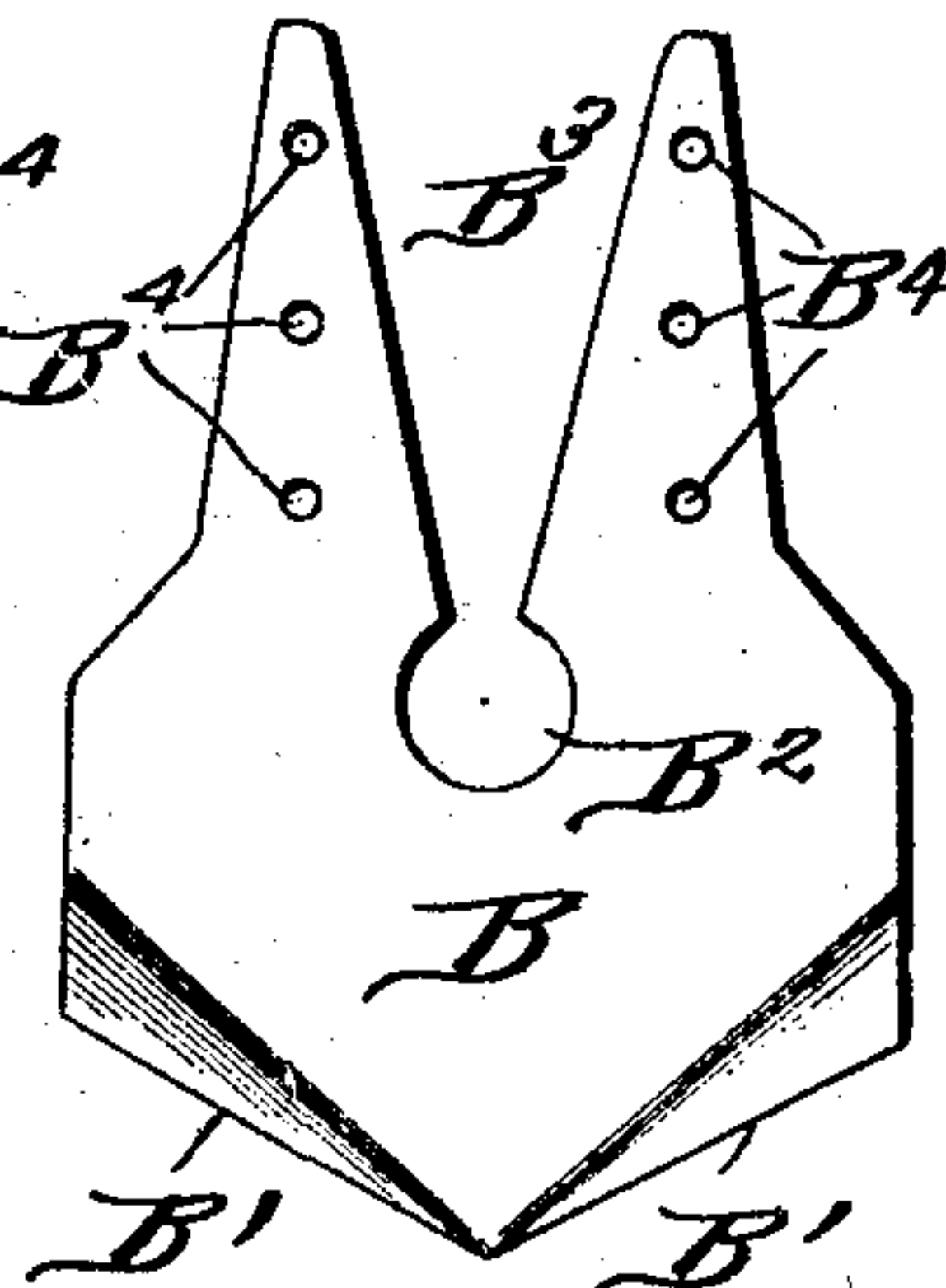
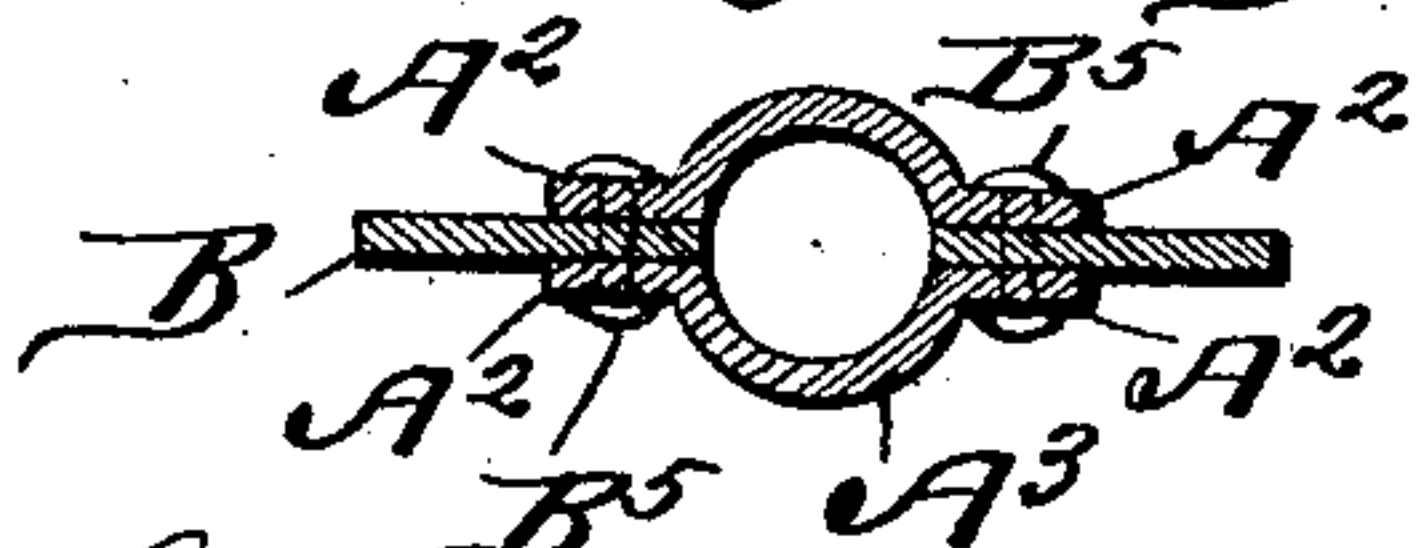


Fig. 3.



Inventor

J. O. Jones.

Witnesses

M. A. Blondel,
Charles Shaw

By

Omar Brock,

Attorneys

UNITED STATES PATENT OFFICE.

JOHN OWEN JONES, OF HYANNIS, NEBRASKA, ASSIGNOR OF ONE-HALF
TO A. J. PLUMER, OF HYANNIS, NEBRASKA.

HYDRAULIC WELL-DRILL.

SPECIFICATION forming part of Letters Patent No. 764,664, dated July 12, 1904.

Application filed March 28, 1903. Renewed March 10, 1904. Serial No. 197,584. (No model.)

To all whom it may concern:

Be it known that I, JOHN OWEN JONES, a citizen of the United States, residing at Hyannis, in the county of Grant and State of Nebraska, have invented a new and useful Hydraulic Well-Drill, of which the following is a specification.

This invention relates generally to drills, and more particularly to one employed for drilling wells, the object being to provide a drill in connection with the tube, said drill and tube being connected in such a manner that the lower end of the tube will not become clogged; and with this object in view my invention consists, essentially, in splitting the lower end of the tube to which the drill-bit is to be connected, bending said split portions of the tube outwardly, so as to provide ears or wings between which the upper portion of the drill-bit can be connected, said drill-bit being slotted centrally, so that the lower end of the tube will be unobstructed, thereby preventing clogging during the drilling operation.

The invention consists also in certain details of construction and novelties of combination, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a perspective view of a hydraulic well-drill constructed in accordance with my invention. Fig. 2 is a view showing the lower end of the tube in section, the drill-bit being shown in elevation. Fig. 3 is a sectional view on the line 3 3 of Fig. 2. Fig. 4 is a detail perspective view of the bit. Fig. 5 is a side elevation of a slight modification.

In carrying out my invention I employ a tube A, to the lower end of which the drill-bit B is connected. The lower end of this tube A is split, as shown at A', and the split portions are then bent outwardly in parallel relation, providing ears or wings A², the remaining portion of the tube being contracted, as shown at A³. The drill-bit B has the inclined cutting edges B', which are bent slightly in reverse directions. The bit is formed with a central opening B², preferably circular in shape, and the top portion of the said bit is bifurcated or divided by means of an essentially V-shaped slot or opening B³,

which extends from the top of the bit to the central opening B². The members are tapered gradually toward their upper ends, as shown, and these tapered members are provided with a plurality of openings B⁴, through which the rivets B⁵ are passed, said rivets passing through ears or wings A², the tapered members of the bit being inserted between the said ears or wings, as most clearly shown in Fig. 3, and it will be noted that the central opening of the bit is brought directly beneath the contracted open end of the tube A.

By means of a drill constructed as herein shown and described the drilling operation can be rapidly carried on, as all danger of clogging is entirely avoided, inasmuch as the open end of the tube communicates with the central opening of the drill-bit, and that portion of the drill-bit which is connected to the lower end of the tube is slotted or divided, so that it will be practically impossible for the lower end of tube to become clogged.

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

1. A drill of the kind described, comprising a tube, a drill-bit connected thereto; said drill-bit having a central opening, and a slot extending from the said central opening to the upper end of the bit.

2. A drill of the kind described comprising a tube having ears at its lower end, a drill-bit having a central opening, and a slot extending from the central opening to the upper end, the members of the drill-bit being secured to the ears of the tube, substantially as described.

3. A drill of the kind described, comprising a tube split at its lower end, said split portions being bent outwardly providing parallel ears, and the drill-bit, the upper portion thereof being bifurcated, the members of the drill-bit being arranged between the ears carried at the lower end of the tube and securely fastened between said ears, substantially as shown and described.

JOHN OWEN JONES.

Witnesses:

F. E. VALENTINE,
L. B. UNKEFER.