

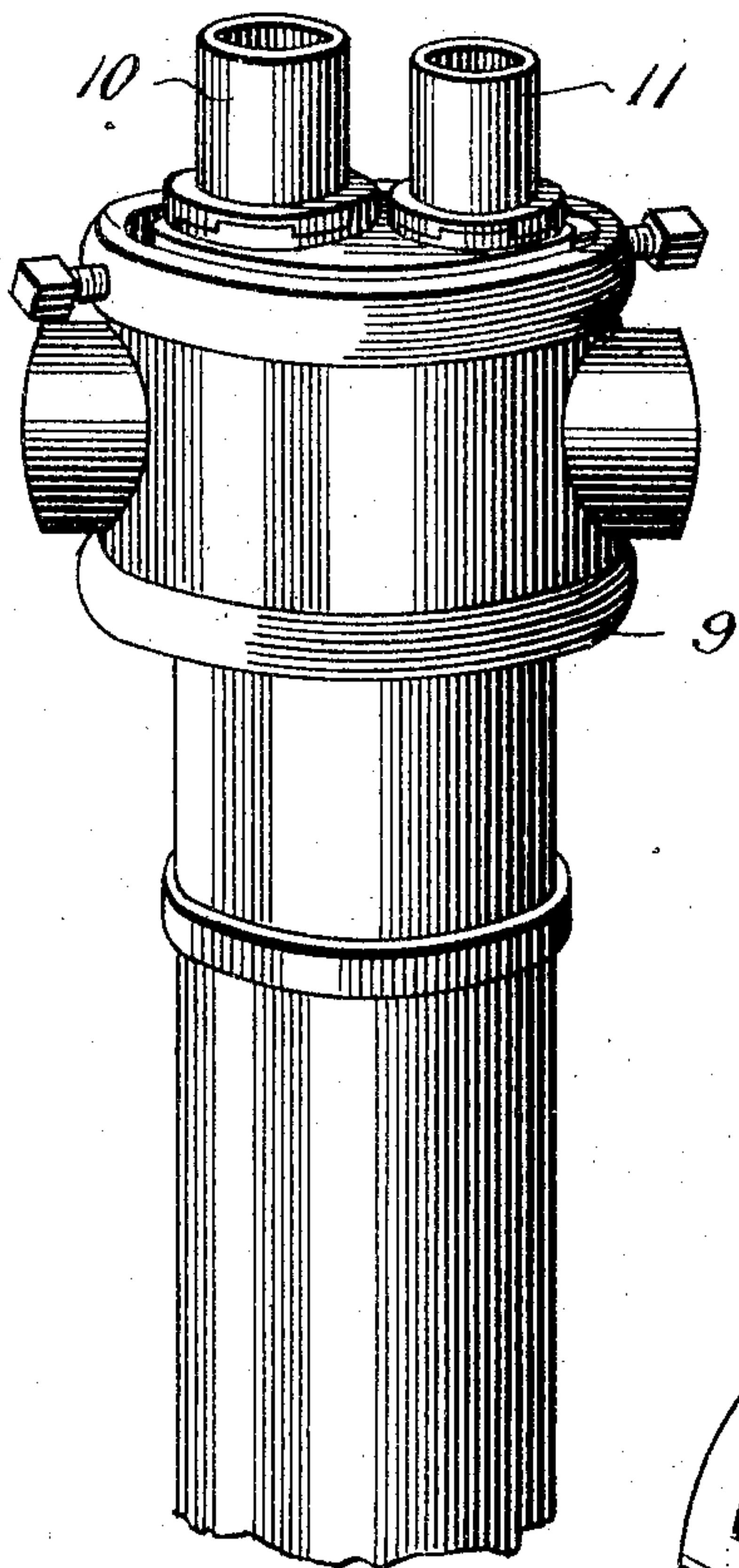
No. 780,861.

PATENTED JAN. 24, 1905.

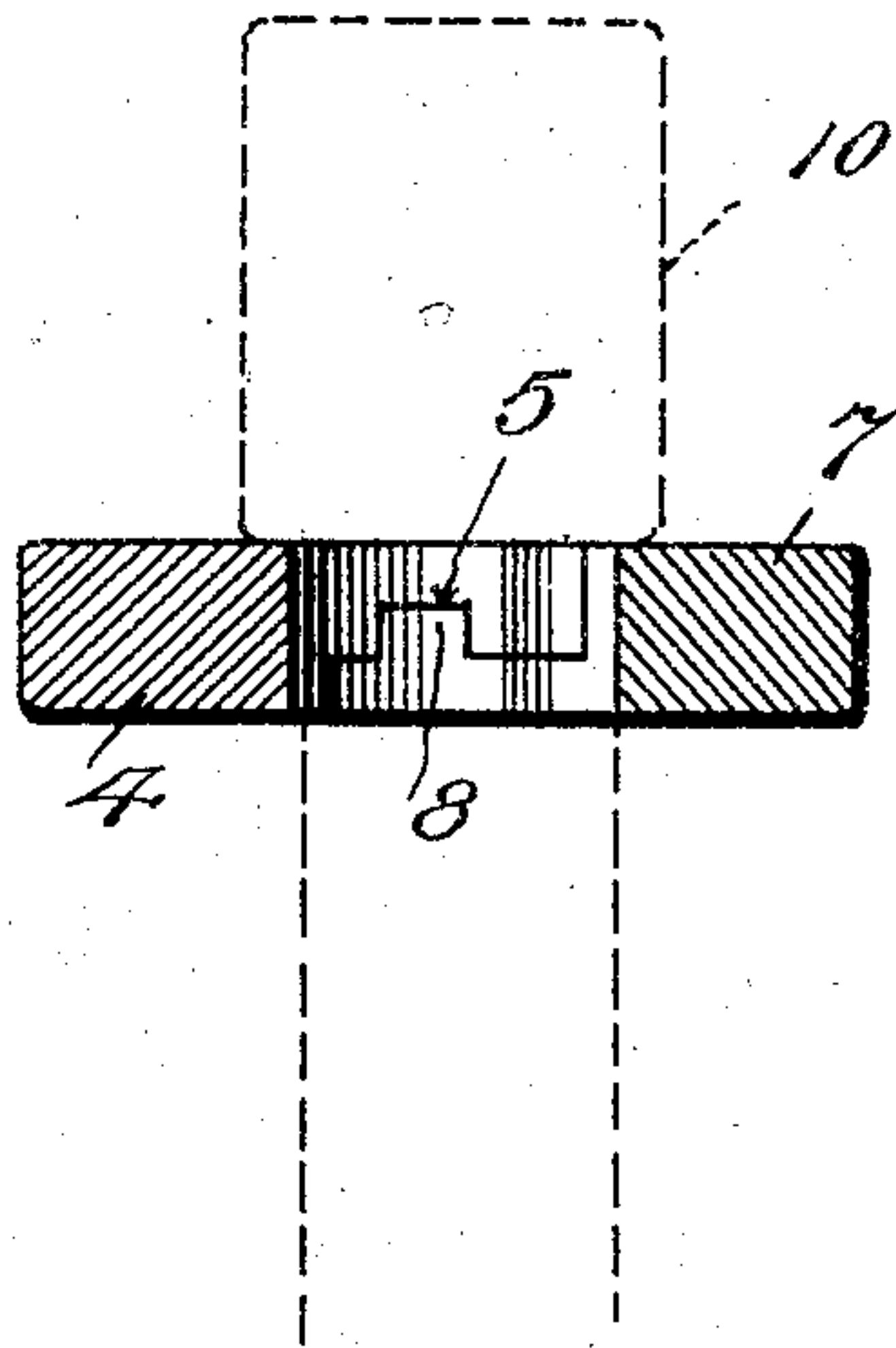
E. D. BUZARD.  
TUBING RING.

APPLICATION FILED MAY 28, 1904.

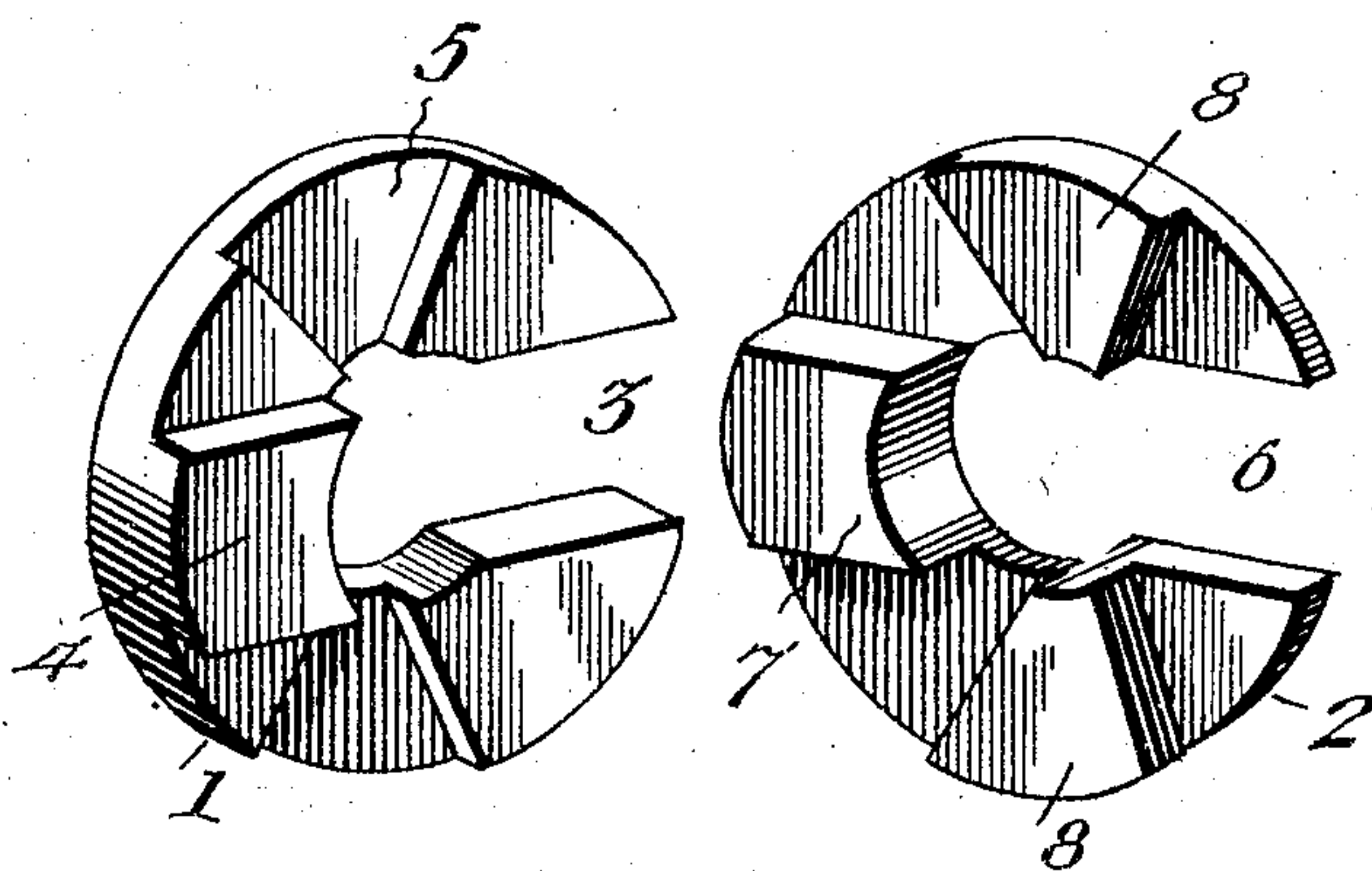
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses

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# UNITED STATES PATENT OFFICE.

EDMIRE D. BUZARD, OF POLLOCK, PENNSYLVANIA.

## TUBING-RING.

SPECIFICATION forming part of Letters Patent No. 780,861, dated January 24, 1905.

Application filed May 28, 1904. Serial No. 210,293.

*To all whom it may concern:*

Be it known that I, EDMIRE D. BUZARD, a citizen of the United States, residing at Pollock, in the county of Clarion and State of Pennsylvania, have invented new and useful Improvements in Tubing-Rings, of which the following is a specification.

My invention relates to new and useful improvements in tubing-rings such as employed for carrying the weight of tubing used in oil-wells; and its object is to provide a ring formed of sections which can be readily removed from the tubing without necessarily displacing said tubing. Heretofore in the use of one-piece rings for this purpose it has been found necessary to break them whenever the tubing becomes wedged or sticks in the sand within the well. Considerable expense is thus entailed.

My invention consists of a ring which is formed of two sections, each having a slot extending thereinto from one side and a series of projections and recesses whereby when the sections are oppositely disposed and placed one upon the other a practically solid ring having a central opening therein is produced. These sections are prevented from moving independently of each other and will firmly support the tubing.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a perspective view of a casing-head such as used in oil-wells and showing my improved tubing-rings in position under the couplings of tubing. Fig. 2 is an enlarged section through one of the rings and showing in dotted lines a tube and its coupling in position therein, and Fig. 3 is a perspective view showing the two parts of the ring detached.

Referring to the figures by numerals of reference, 1 and 2 are sections which when assembled form the ring which constitutes my invention. Section 1 has a slot 3 extending thereinto from its periphery, and at the inner end of this slot is formed a projection 4, the opposite ends of which aline with the periph-

ery of the section 1 and the end wall of the slot 3, respectively. The sides of this projection are parallel, and the distance between the sides is equal to the width of the slot 3. Oppositely-disposed wedge-shaped recesses 5 are formed within the section 1 at points equidistant from projection 4. The section 2 of the ring has a slot 6 extending thereinto from its periphery, which is equal in length, width, and contour to the slot 3, and at the inner end of this slot 6 is a projection 7, equal in width to the slot 6 and having its ends alining with the periphery of the section 2 and the end wall of slot 6. Smaller oppositely-disposed wedge-shaped projections 8 are formed upon the section 2 at points equidistant from the projection 7, and these projections 8 are equal in area to the recesses 5, before referred to.

9 is the casing-head ordinarily employed in oil-wells, and 10 and 11 are couplings used in connecting sections of tubing. After the tubing has been lowered to desired points within the casing of the well the same is adapted to be held by placing a ring therearound and below one of the couplings, so as to cause the casing-head to receive the entire weight of the tubing.

By employing my improved tubing-ring said ring can be readily placed in position by first sliding the section 1 with its flat face downward until the tubing contacts with the inner end of the slot 3. The section 2 of the ring is then placed over the section 1 and slid longitudinally thereon. Projection 7 will move into slot 3 and projection 4 will be received by slot 6. When projections 8 arrive above the recesses 5, they will drop thereinto, and the two parts of the ring will thus be securely interlocked, and the coupling to the tubing can be placed thereon and the entire tubing firmly supported. Should it be necessary to remove the ring for any purpose, this can be done without breaking it, as it is merely necessary to partly raise the tubing and to then lift the upper section 2 of the ring and slide it laterally from engagement with the other section.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that



modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly  
5 fall within the scope of my invention.

Having thus fully described the invention, what is claimed as new is—

1. A tubing-ring comprising sections having slots extending thereinto from the periphery thereof, a projection upon each section and  
10 between the end of the slot and the periphery of the sections, and oppositely-disposed projections on one of the sections tapered from their outer to their inner ends and adapted to  
15 fit within similar recesses in the other section.

2. A tubing-ring comprising a section having a slot extending thereinto, and oppositely-disposed recesses in one face and tapered from their outer to their inner ends, and a projection  
20 upon said face and between the end of the slot and the periphery of the section, and a second section having a slot extending thereinto from its periphery, the slots of the two sections being similar, oppositely-disposed

projections upon one face of said second section and tapered from their outer to their inner ends, and a projection upon said face and interposed between the end of the slot and the periphery of the section.

3. The combination with the head of a well-casing, of a tubing-ring arranged thereon comprising oppositely-disposed slotted sections, a projection upon each section and between the end of the slot and the edge of the section, each projection being adapted to fit  
35 within the slot of the other section to form a central opening, and projections upon the inner face of one section and tapered from their outer ends toward the center of the section and adapted to fit within similar recesses in  
40 the inner faces of the other section.

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

EDMIRE D. BUZARD.

Witnesses:

J. M. WATTERSON,  
A. C. W. KIDD.