

No. 840,956.

PATENTED JAN. 8, 1907.

G. R. PRIDE.  
STEAM JOINT.

APPLICATION FILED AUG. 11, 1906.

Fig. 1.

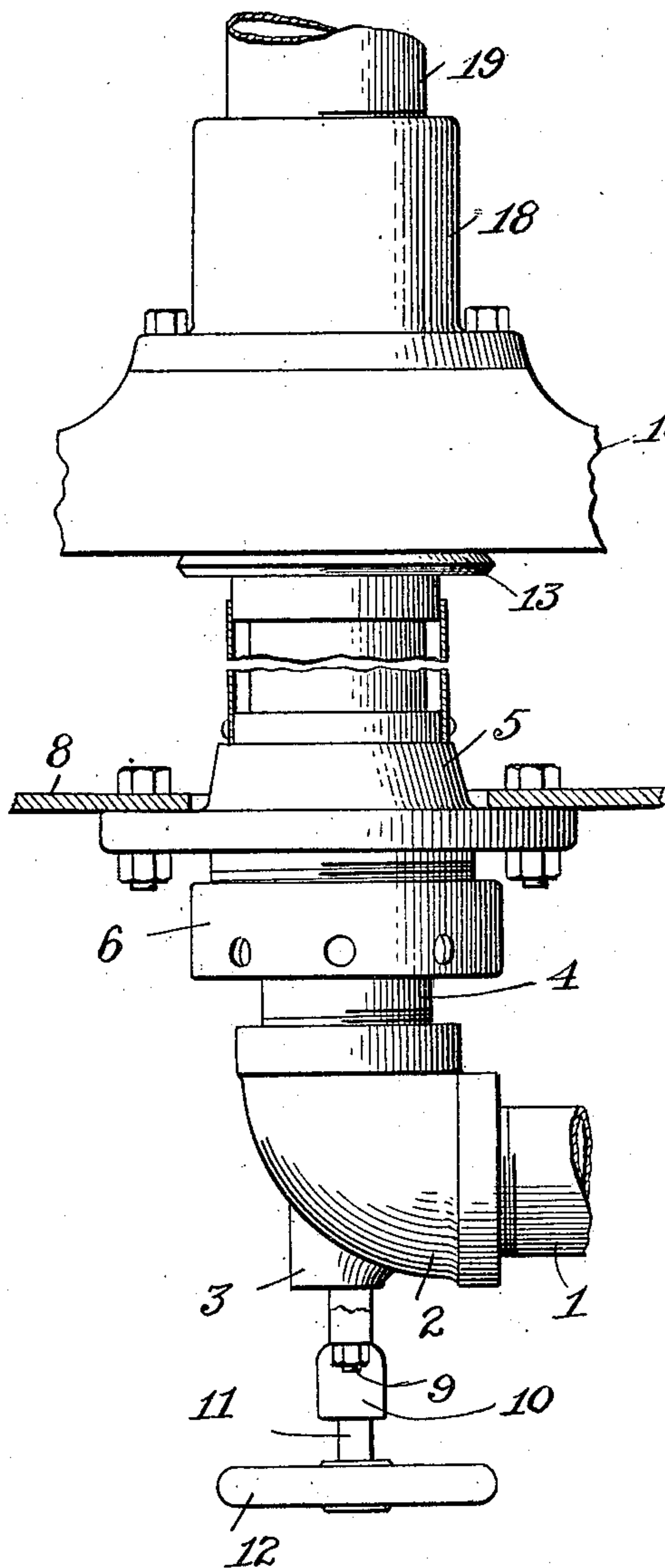
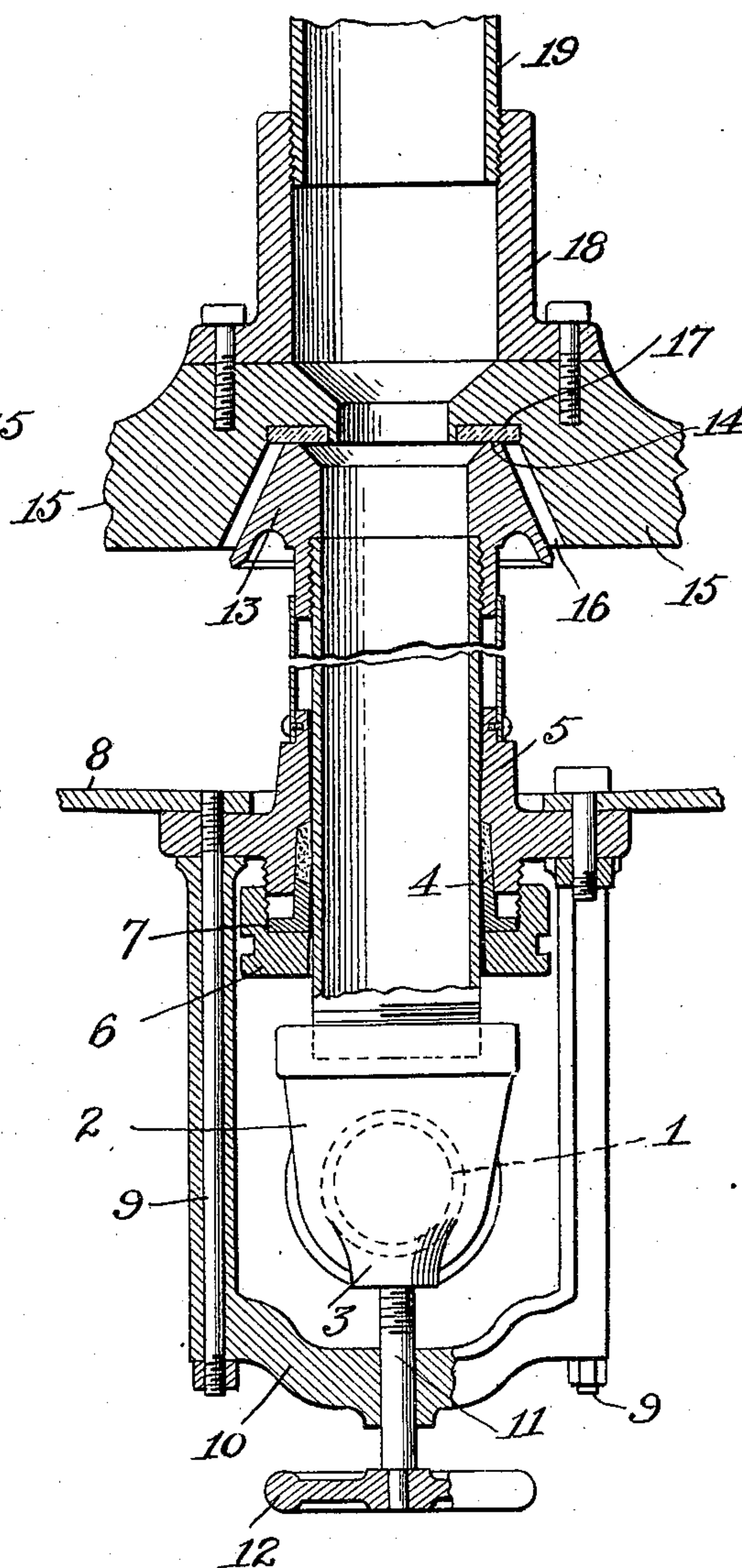


Fig. 2.



Inventor

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Witnesses

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# UNITED STATES PATENT OFFICE.

GUY R. PRIDE, OF JACKSONVILLE, FLORIDA.

## STEAM-JOINT.

No. 840,956.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed August 11, 1906. Serial No. 330,152.

*To all whom it may concern:*

Be it known that I, GUY R. PRIDE, a citizen of the United States, residing at Jacksonville, in the county of Duval, State of Florida, have invented new and useful Improvements in Steam-Joints, of which the following is a specification.

My invention relates to forming temporary vapor-tight joints without the use of fastening devices, and is particularly applicable to devices wherein one vessel is to be removably set within another and is of sufficient weight to form, in conjunction with my improved construction, a vapor-tight joint that will permit of steam or other vapor being introduced through the outer vessel into the inner vessel. This object I accomplish in the manner and by the means hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of my improved construction. Fig. 2 is a central vertical sectional view taken at a right angle to Fig. 1.

Similar numerals of reference denote corresponding parts in the two views.

In the said drawings the reference-numeral 1 denotes a steam-supply pipe tapped into an elbow 2, having a shoulder 3 on its outer surface, as shown. Tapped into the other end of said elbow is a pipe 4, that passes movably through a stuffing-box formed by a casting 5, having a screw-threaded ring 6 engaging the same, between which is located a packing 7. Said ring is bolted to a casing or vessel 8, through an aperture in which it and the pipe 4 pass, while also bolted to said ring, by means of bolts 9, is a yoke 10, passing around the elbow 2 and having a set-screw 11, controlled by a hand-wheel 12, engaging the shoulder 3 on said elbow, whereby said pipe 4 may be adjusted in its stuffing-box. The inner end of said pipe 4 is provided with a collar 13, having angular sides and terminating in a comparatively narrow edge 14.

The under side of the vessel 15, into which the steam or other vapor is to be introduced, is recessed at 16, its sides lying parallel with the angular sides of the collar 13, and has located in said recess an annular packing-ring 17, of comparatively large area, with which the edge 14 of collar 13 is intended to contact. Said vessel 15 is apertured centrally with respect to the recess 16 and has bolted to its other side a fitting 18, receiving a steam-distributing pipe 19, screwed thereinto.

From the above description the operation

of my improved construction will be understood to be as follows: To form the joint, the hand-wheel 12 is first screwed downwardly in its yoke 10 to its lowermost position, so that when the vessel 15 is lowered into position in the casing 8 and its packing 17 contacts with collar 13 of pipe 4 the latter is free to yield downwardly in its stuffing-box under the weight of said vessel 15 and its contents. The parts being in this position, the hand-wheel 12 may be manipulated to force the pipe 4 upwardly in its stuffing-box to seat tightly against packing-ring 17, whereby a perfectly steam-tight joint will be provided. I form the packing-ring 17 of comparatively large area in order to compensate for any slight lateral variation of the position of vessel 15 in the casing 8.

In an application filed by me of even date herewith, Serial No. 330,151, I have illustrated my improved construction as applied to an apparatus for extracting turpentine and other products from wood, to which it is particularly applicable, though it will be evident that said device is equally applicable to many other forms of apparatus.

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

1. An apparatus of the character described, embodying an outer casing, a steam-pipe passing through said casing and adjustable therein, an inner vessel adapted to seat in said outer casing and having a packing-ring adapted to contact with said steam-pipe, and a steam-distributing pipe within said inner vessel registering with said outer-casing steam-pipe through said packing-ring.

2. An apparatus of the character described, embodying an outer casing, a stuffing-box therein, a steam-pipe adjustable in said stuffing-box, an inner vessel adapted to seat in said outer casing and having a packing-ring of comparatively broad area adapted to contact with said steam-pipe in any position that said inner vessel may assume in said outer casing, and a steam-distributing pipe within said inner vessel registering with said outer-casing steam-pipe through said packing-ring.

3. An apparatus of the character described, embodying an outer casing, a stuffing-box therein, a steam-pipe adjustable in said stuffing-box, an inner vessel adapted to seat in said outer casing and having a packing-ring adapted to contact with said steam-



pipe, and a steam-distributing pipe within said inner vessel registering with said outer-casing steam-pipe through said packing-ring.

4. An apparatus of the character described, embodying an outer casing, a stuffing-box therein, a steam-pipe movable in said stuffing-box, a yoke attached to said outer casing and surrounding said steam-pipe, a set-screw in said yoke engaging said steam-pipe to regulate its movement in said stuffing-box, an inner vessel adapted to seat in said outer casing and having a packing-ring adapted to contact with said steam-pipe, and a steam-distributing pipe within said inner vessel registering with said outer-casing steam-pipe through said packing-ring.

5. An apparatus of the character described, embodying an outer casing, a steam-

pipe passing through said casing and adjustable therein and having a narrow annular seat at its inner end, an inner vessel adapted to seat in said outer casing and recessed in its under side, a packing-ring in said recess against which the narrow annular seat of the steam-pipe is adapted to seat when said inner vessel is in position, and a steam-distributing pipe within the inner vessel communicating through said inner vessel and packing-ring with said outer-casing steam-pipe.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GUY R. PRIDE.

Witnesses:

WILL R. SMITH,

WM. J. ECKHARDT.