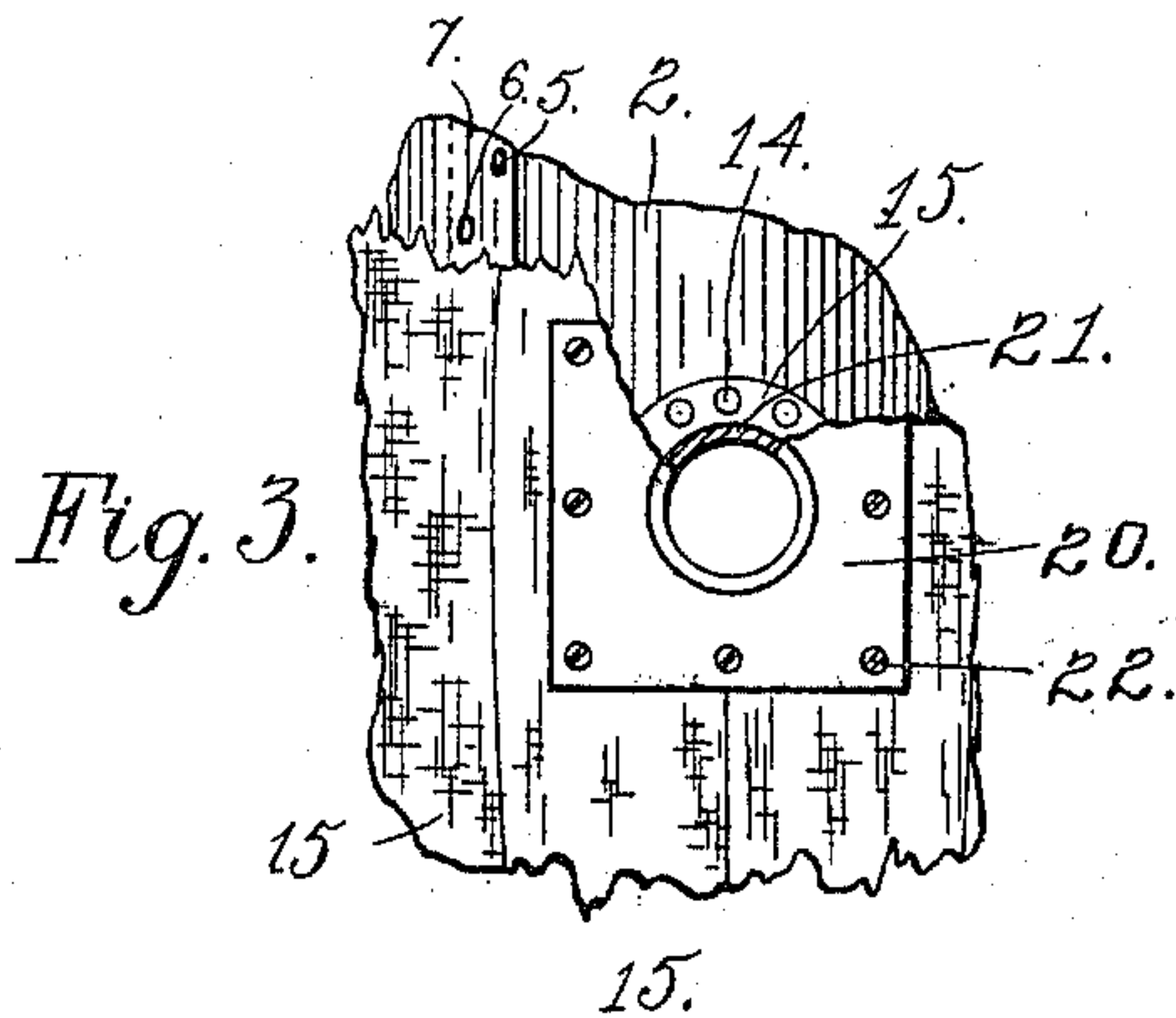
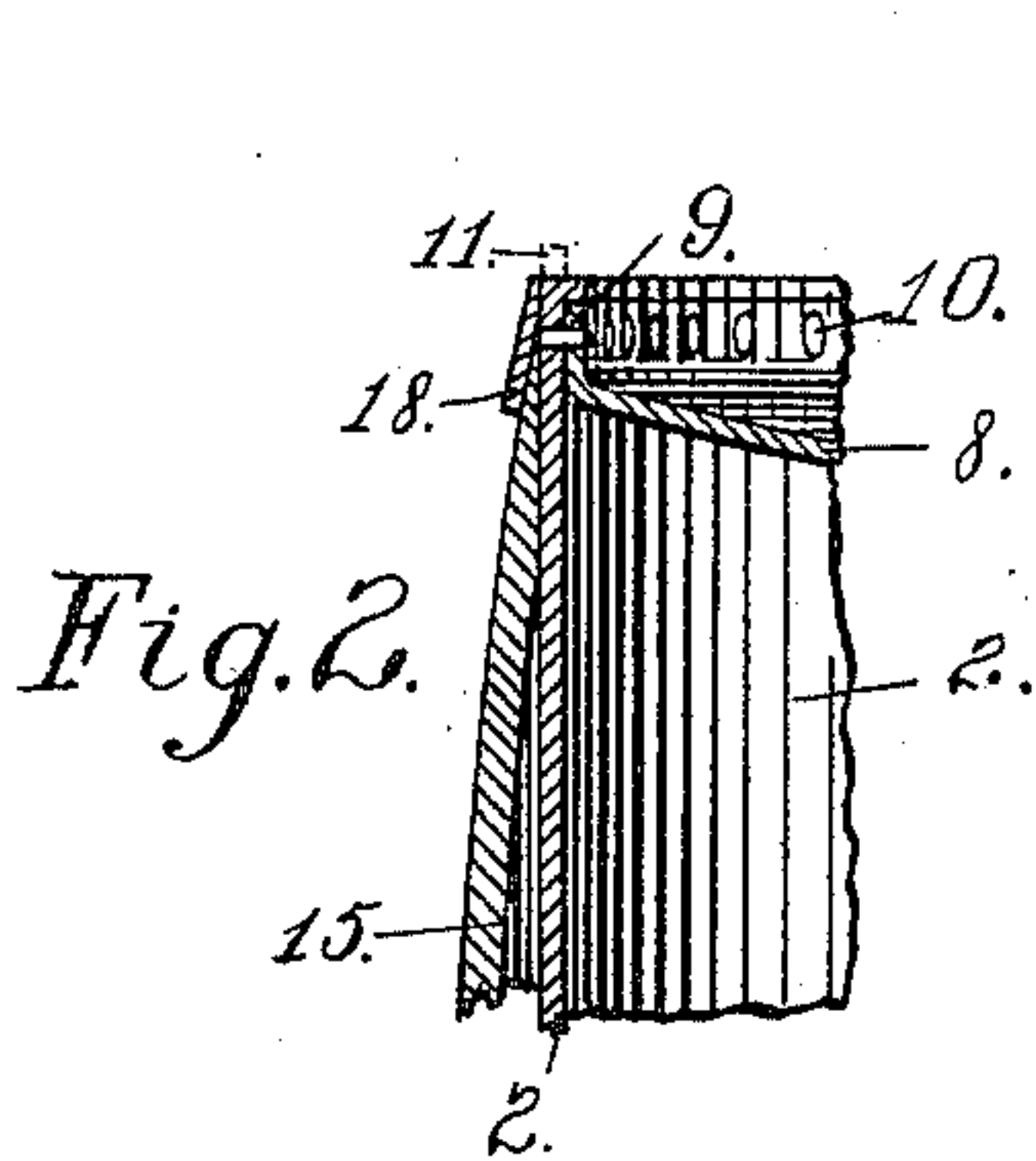
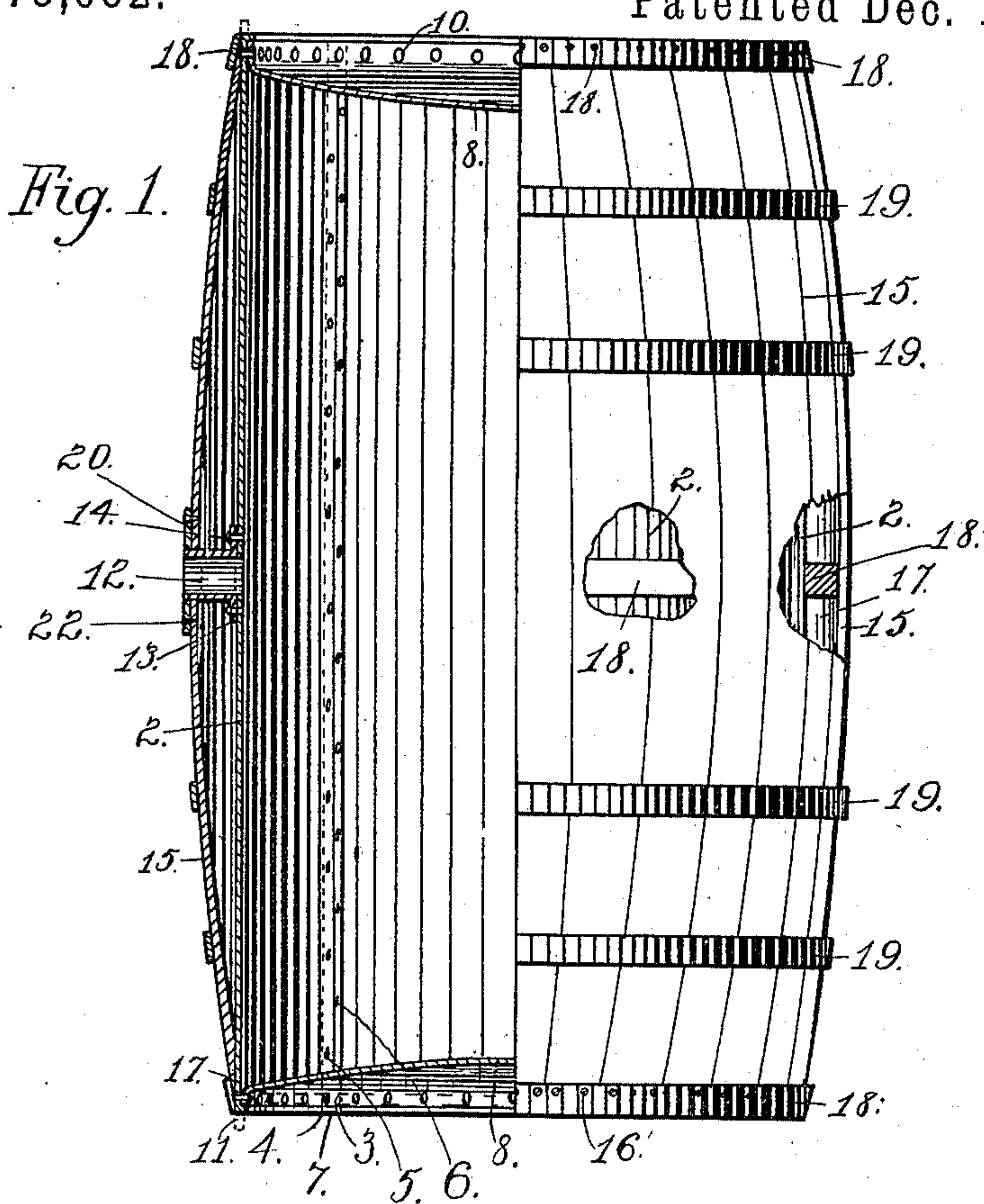


I. VAN TILBURG.  
METALLIC BARREL.

No. 573,062.

Patented Dec. 15, 1896.



Witnesses:-

J. G. Brachury.  
W. C. Swift.

Inventor:-

Ira Van Tilburg.  
per: T. D. Merwin  
Attorney.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 4.

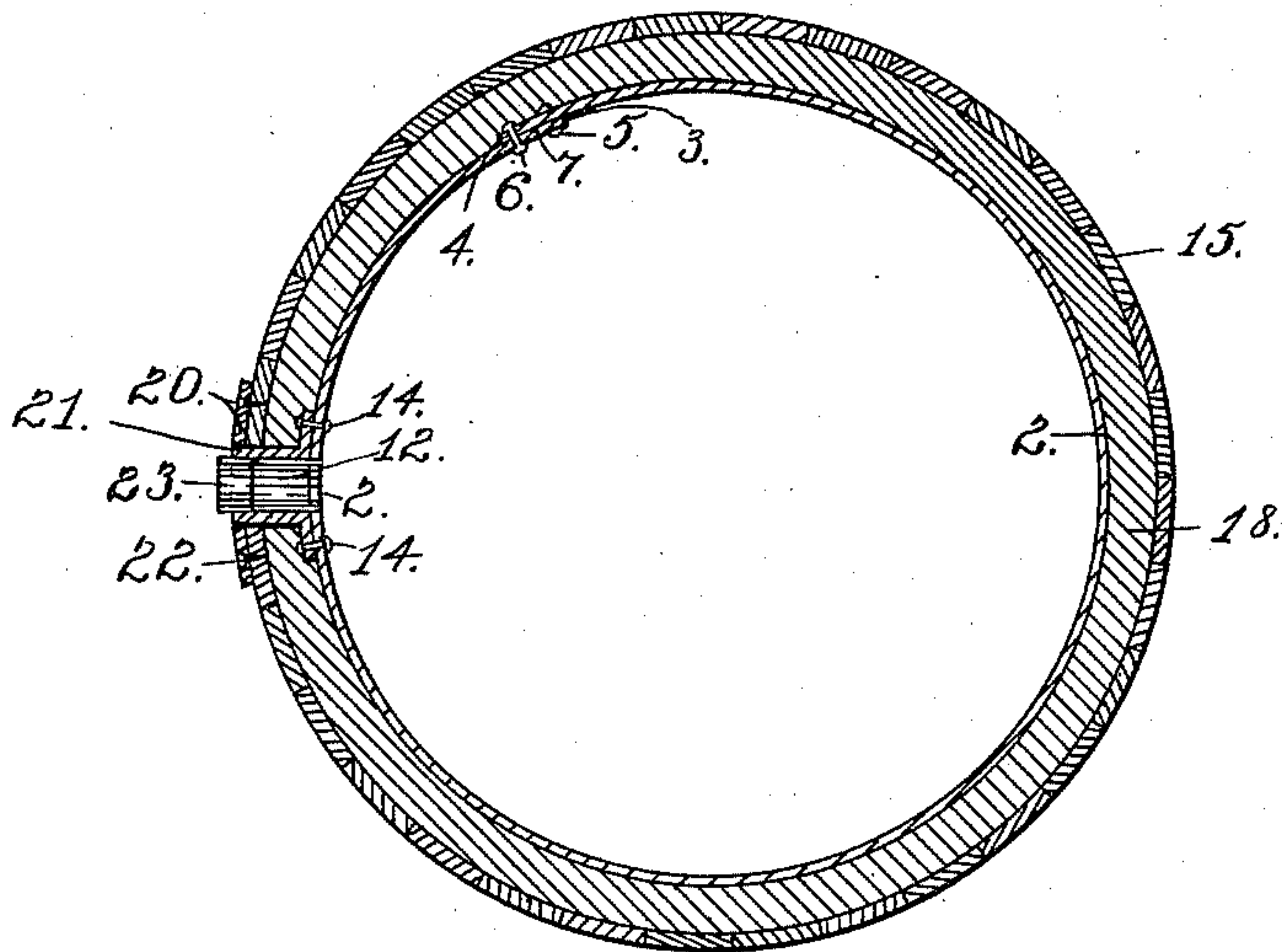


Fig. 5.



Fig. 6.

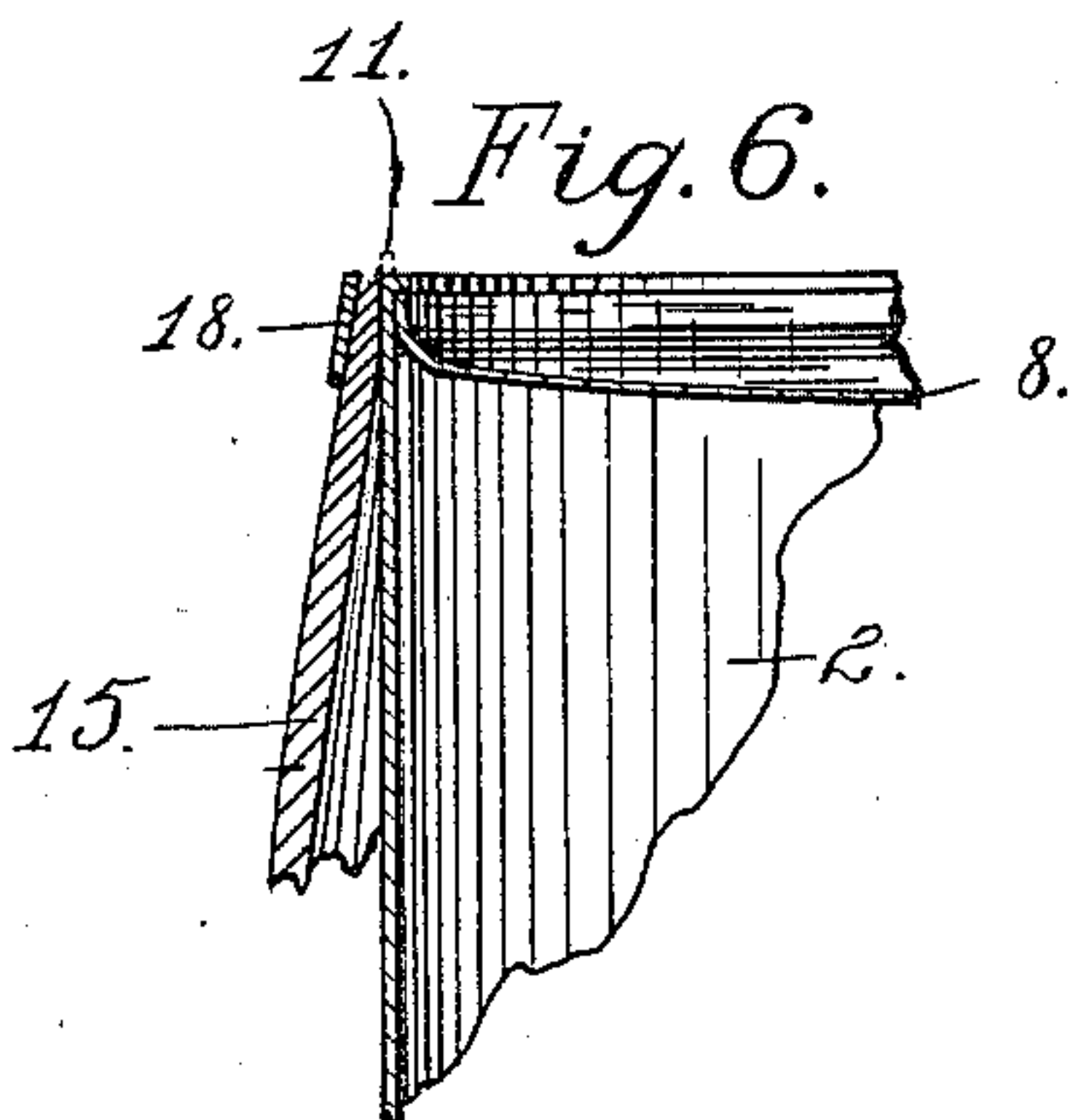
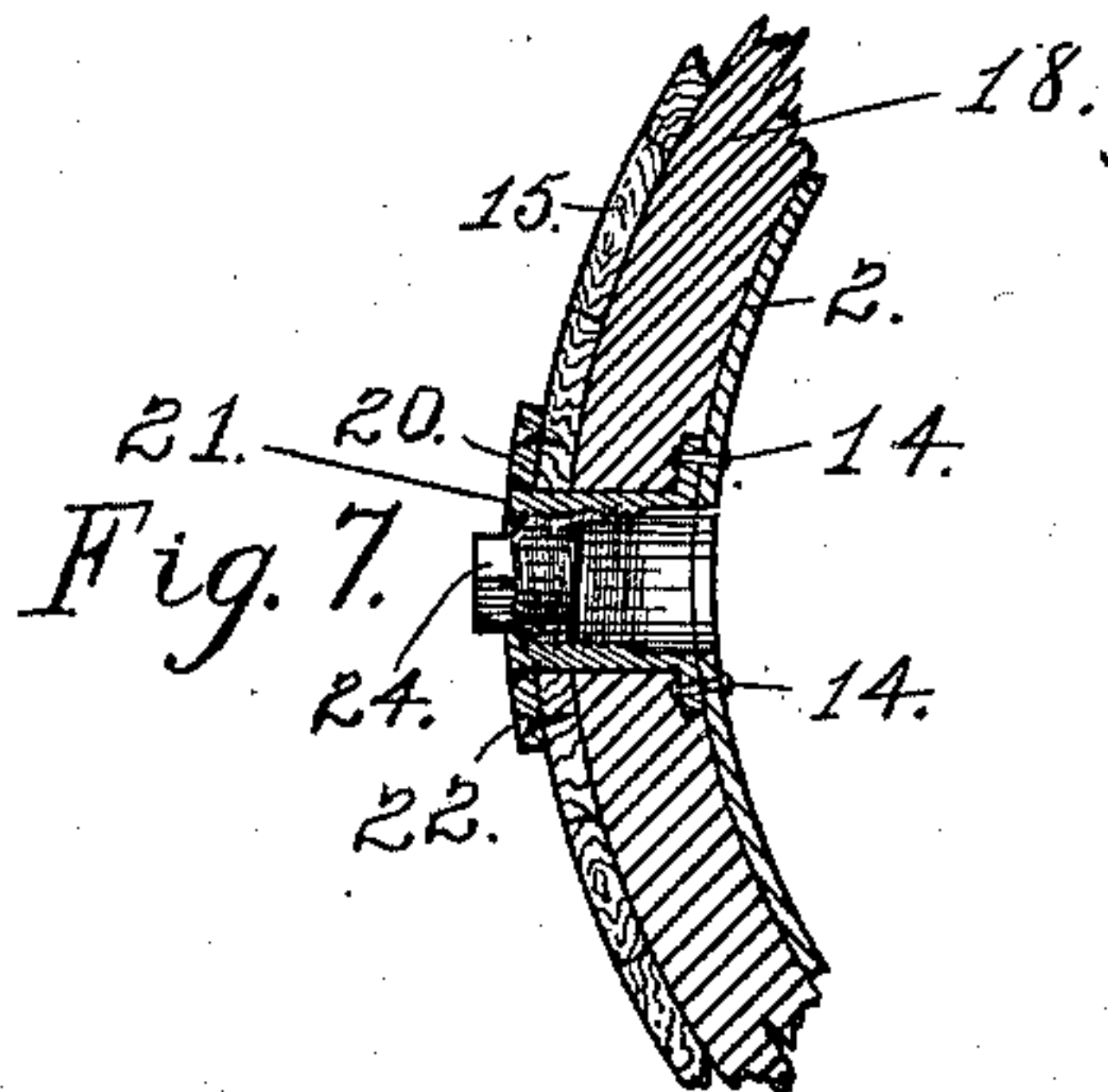


Fig. 7.



Witnesses:-

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Inventor:-

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per: T. D. Munn  
Attorney.



# UNITED STATES PATENT OFFICE.

IRA VAN TILBURG, OF ST. PAUL, MINNESOTA.

## METALLIC BARREL.

SPECIFICATION forming part of Letters Patent No. 573,062, dated December 15, 1896.

Application filed January 27, 1894. Serial No. 498,185. (No model.)

*To all whom it may concern:*

Be it known that I, IRA VAN TILBURG, of St. Paul, Ramsey county, Minnesota, have invented certain Improvements in Metallic Barrels, of which the following is a specification.

My invention relates to improvements in metallic barrels, its object being to provide a protecting cover or jacket for the vessel of such form as to make it most convenient for handling and shipment.

The advantages of metallic barrels and similar vessels in preventing leakage and evaporation are offset to some extent by the liability of injury to the thin metal from bruising and loosening of the joints, and also a metallic vessel of the ordinary cylindrical form is exceedingly inconvenient for handling, all of which disadvantages are overcome by my improvement, which consists in inclosing the metallic cylinder in a jacket or covering of staves shaped as in an ordinary wooden barrel. Thereby I obtain an improved vessel having all the advantages of holding liquid without loss by leakage and of a form convenient for handling, and also affording a perfect protection to the metal.

My invention further consists in the construction and combination hereinafter particularly described, and pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a longitudinal half-section and half-elevation broken away at the bilge of my improved barrel, showing the manner of construction and protection. Fig. 2 is a detail view and longitudinal section of a part of one construction of an end of a barrel. Fig. 3 is a detail view, in broken elevation, of that portion of the bilge of the barrel containing the bung-hole. Fig. 4 is a cross-section of the barrel at the bilge. Fig. 5 is a cross-section of the metallic head of the barrel. Fig. 6 is a detail view, in longitudinal section, of a part of a modified construction of the end of the barrel; and Fig. 7 is a detail view in section, showing the threaded bung with the threaded plug inserted.

The barrel proper of my improved device consists of the sheet-metal plate 2, cylindrically bent and with its ends 3 and 4 lapped sufficiently to permit the riveting thereof with

two rows of rivets 5 and 6 alternately set to give the lap-joint 7. Into the open ends of this cylinder so formed are placed the concave heads 8, with their edges 9 bent parallel with the cylinder and set in from its ends about the thickness of the material. They are secured in such position with the rivets 10, after which they are soldered, and then the edges 11 (shown in dotted lines) of the cylinder are hammered in and over the edges of the head, thereby forming a very perfect joint. The bung 12, a cylindrical cast-metal piece with a flange 13 at the bottom thereof, is secured to the cylinder 2 at a point midway between its ends by the rivets 14. The inner surface of the bung is either plane or threaded, respectively adapted for a wooden plug 23 or a threaded metallic plug 24. This cylindrical barrel is protected in use by an outer coating of wooden staves 15, having either their full thickness at the ends or beveled to the edges 17, which do not then quite reach the ends of the cylinder. In the latter instance the end hoops 18, fitting closely both the staves 15 and the cylinder ends 11, are soldered to the latter and secured to the former by the screws 16, placed therethrough into the staves 17. The ends of the staves bearing upon the cylinder beyond the rivets which secure the heads to the cylinder are held the more firmly in position by contact with the heads of the rivets, thus increasing the firmness of the structure. In the bilge of the protecting-staves, encircling the cylinder and extending from one side of the bung to the other, is placed the wooden hoop 18, upon which rest the staves, which are held firmly thereto by the outer hoops 19.

Around the bung and covering the adjacent staves is placed the protecting metal plate 20, over the outer edge of the hole, in which plate the outer end 21 of the bung is slightly expanded and then soldered. The plate is then secured to the covered staves by the screws 22.

I claim—

1. As an improved article of manufacture, a stave-jacketed metallic barrel composed of a sheet-metal cylinder having each end bent to form a flange at right angles with the body of the cylinder, the concave heads each having an outwardly-projecting circumferential

flange fitted to said cylinder, and abutting against the cylinder-flange, and the rivets securing said head-flange to said cylinder.

2. As an improved article of manufacture,  
5 a stave-jacketed metallic barrel composed of a sheet-metal cylinder having each end inturned to form a flange at right angles with its body, the concave heads each having an outwardly-projecting flange fitting to said cyl-  
10 inder and abutting against but not connected with its inwardly-turned end, the wooden

staves surrounding said cylinder, the medially-arranged bung-tube extending through said cylinder and staves, and the hoop interposed between said staves and cylinder, with 15 its ends abutting against said tube.

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

IRA VAN TILBURG.

Witnesses:

H. S. JOHNSON,  
W. C. SWIFT.