

G. SHIELDS.
BARREL.

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969,205.

Patented Sept. 6, 1910.

FIG. 1.

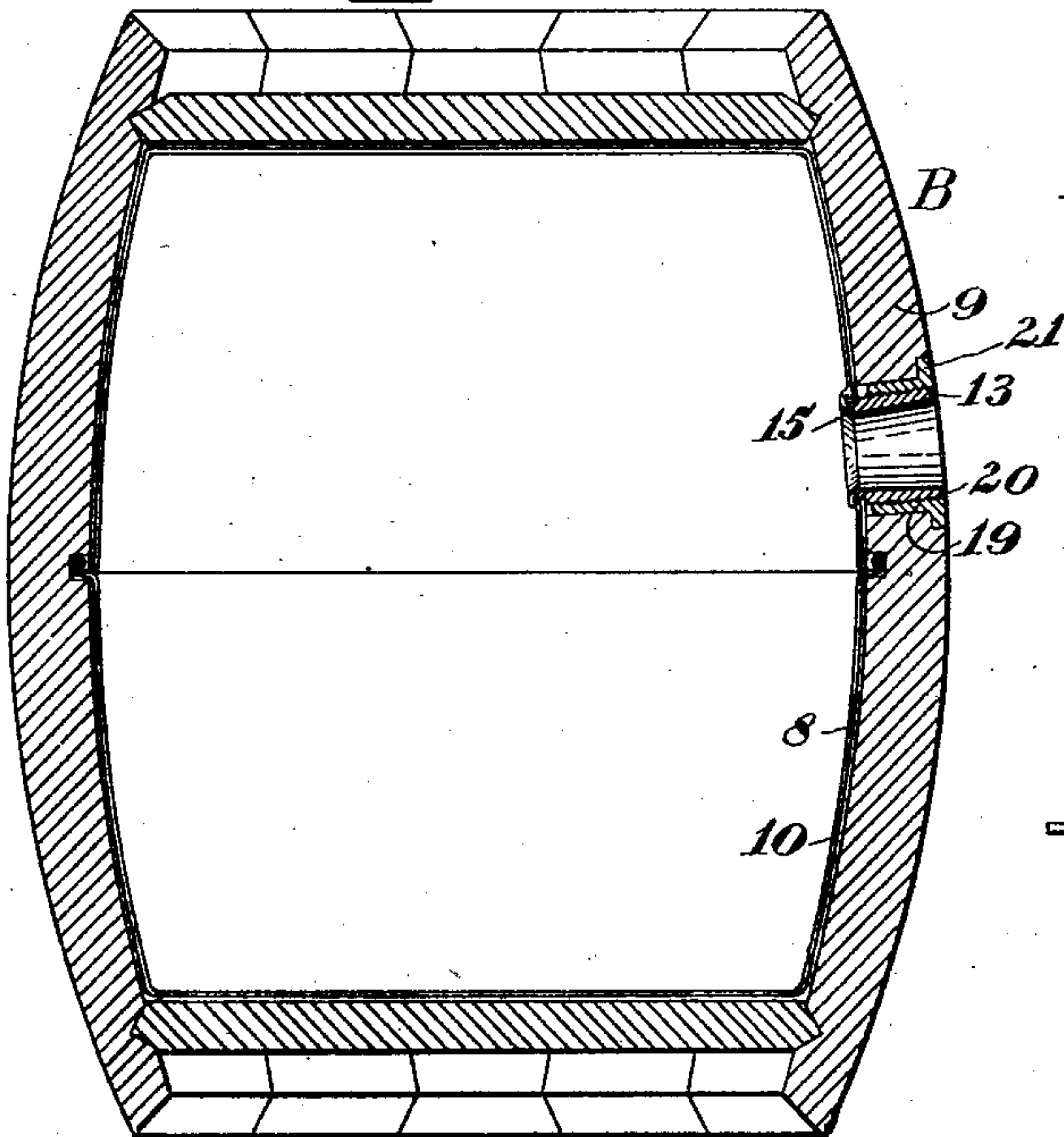


FIG. 4.

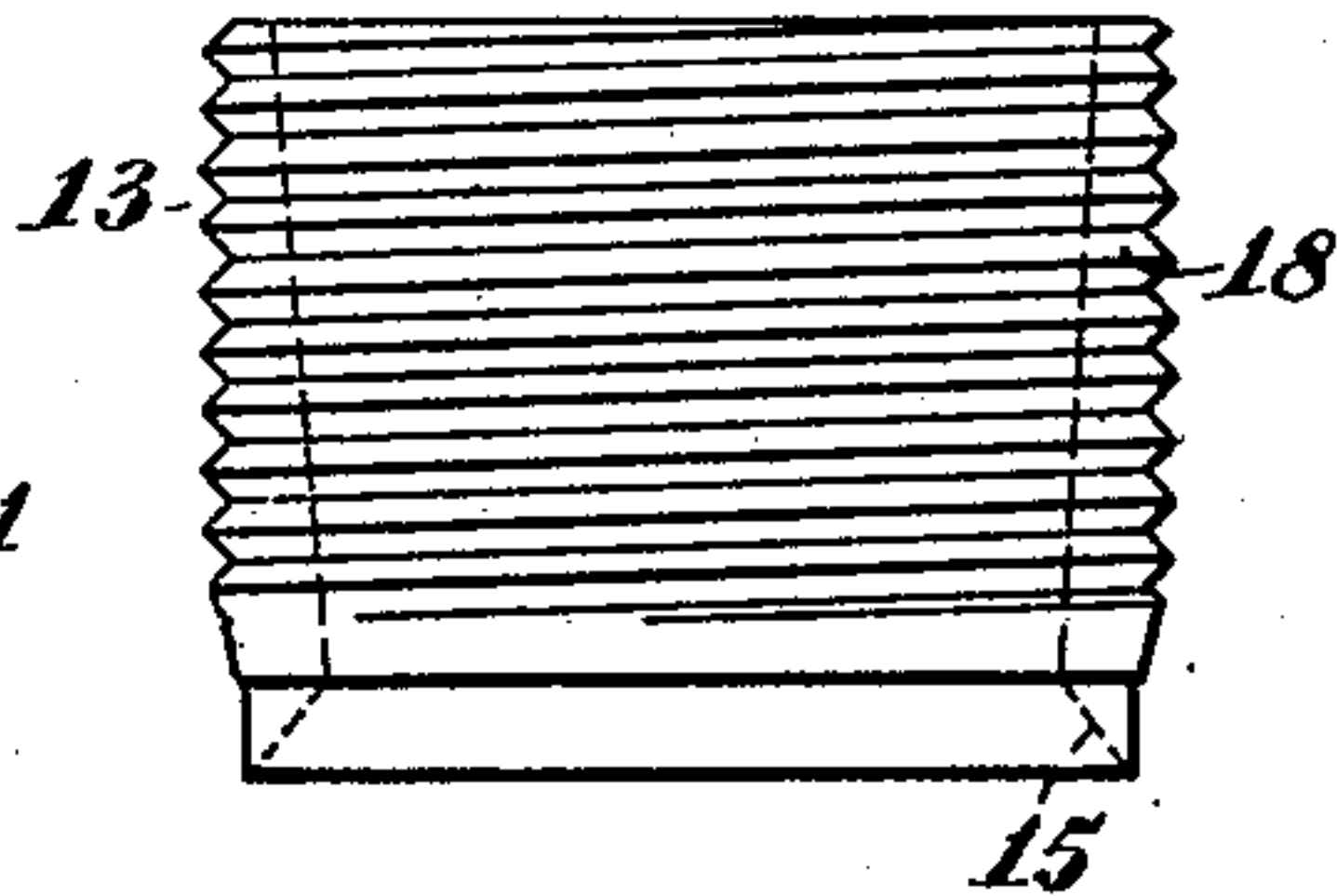


FIG. 5.

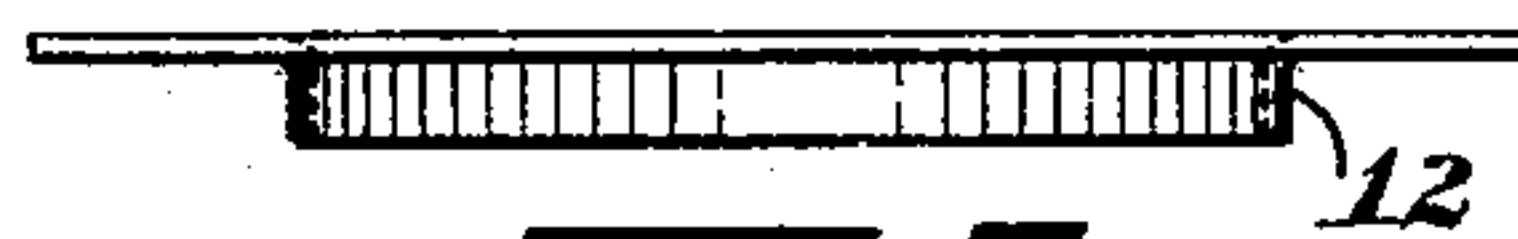


FIG. 6.

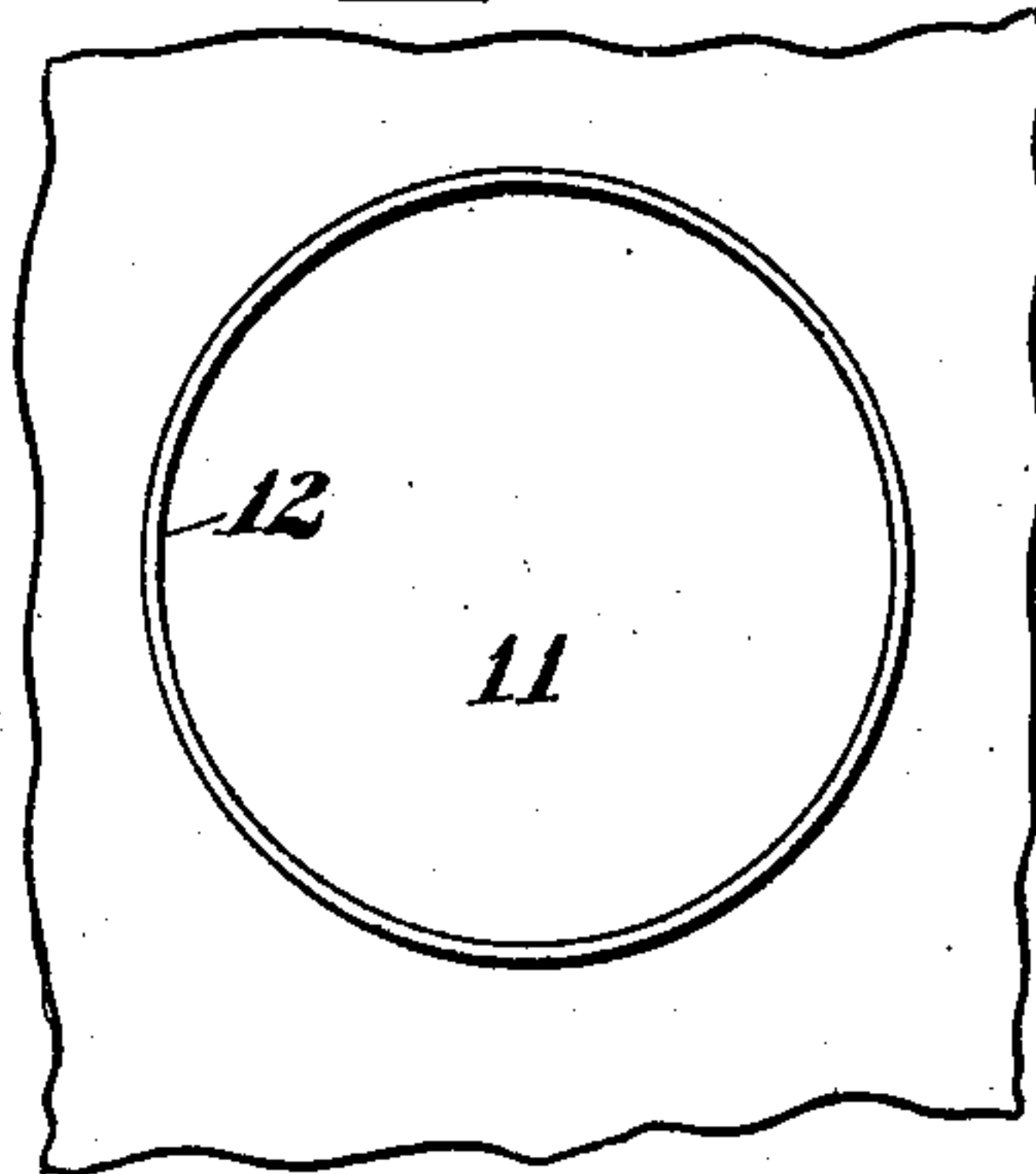


FIG. 2.

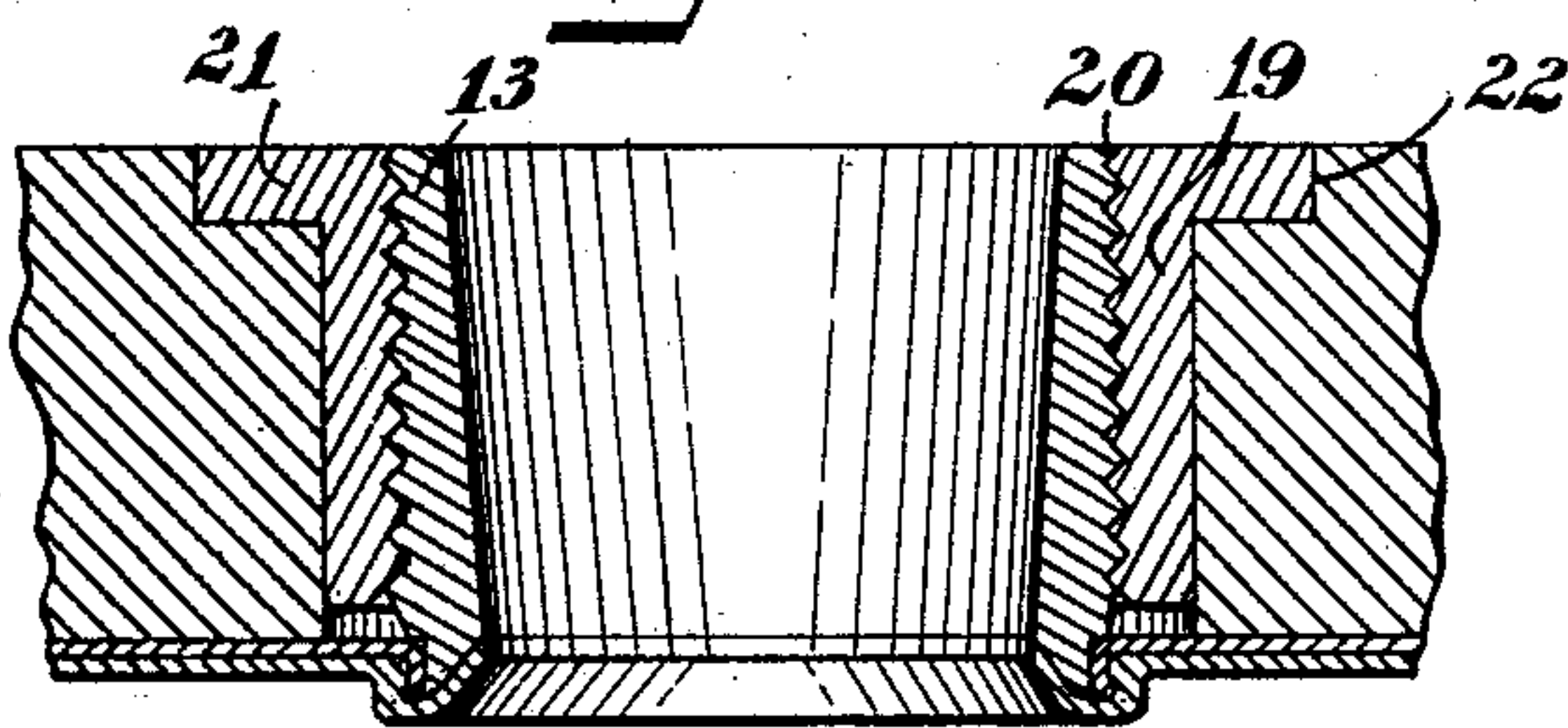
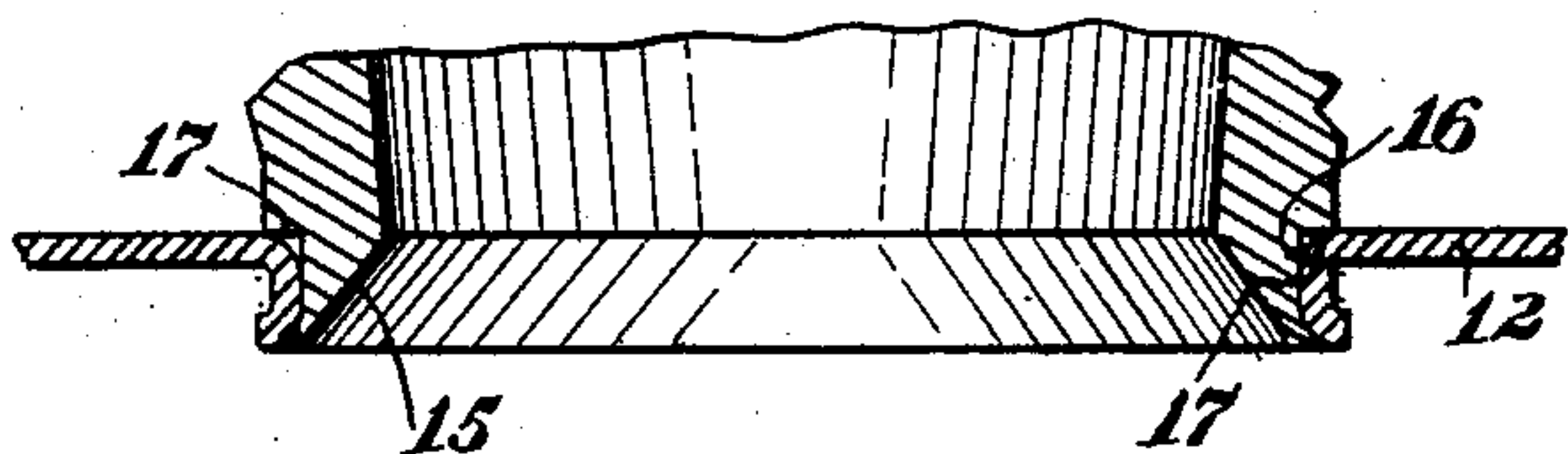


FIG. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE SHIELDS, OF BROOKLYN, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS,
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A CORPORATION OF NEW YORK.

BARREL.

969,205.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE SHIELDS, a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Barrels, of which the following is a specification.

This invention has for its object to produce an improved form of bushing for use with barrels or the like receptacles comprising a comparatively thick casing of wood or such material, provided with a metal lining, which lining has an inner coating of vitreous material; which bung will be securely fastened to the lining member and will also have the vitreous coating of the barrel applied to its inner end up to the conical bore of the bushing, whereby to prevent access of the liquid contents to any part of the bung unprotected by the vitreous lining.

In the accompanying drawing representing an embodiment of my invention, Figure 1 is a vertical middle section through a barrel showing the bung. Fig. 2 shows on a larger scale a section through the bung portion of the barrel. Fig. 3 shows still further enlarged the adjacent portions of the bung sleeve and the metal lining of the barrel, before application of the vitreous lining. Fig. 4 shows separately in elevation the sleeve member. Fig. 5 shows in elevation the metal lining at the bung portion; and Fig. 6 is a plan of the same.

The receptacle or barrel B is shown provided with a metal lining 8 arranged inside of the main portion 9 of the barrel that is usually formed of wooden staves. The metal lining has an inner coating 10 of vitreous material to prevent action by the metal on the contents of the barrel, that is highly necessary with spirituous liquors. The metal lining is shown as provided with an opening 11, at which portion a flange 12 extends inwardly.

The bung member comprises essentially a sleeve 13 and a clamping member secured thereto. The sleeve 13, shown separately in Fig. 4 has at its inner end a beveled portion 15 in the bore. At this end is an externally reduced portion 16, forming an abutment 17, into which portion fits the flange portion 12 of the metal lining, as best shown in Fig. 3. When the sleeve is inserted into

the opening 11 in engagement with the flange, the sleeve and flange are suitably secured together at their contiguous parts. This preferably is effected by forcing the extremity of the tapered portion outward and also the flange, and welding the contiguous parts together, which is indicated in Fig. 2. This would make an effective tight joint at these parts.

When the coating is applied to the metal lining of the barrel, it is continued along the external portion of the flange 12 and also along the tapered end portion 17 of the sleeve 13, as shown in Fig. 2. This will entirely protect the bung, or sleeve 13, from access to the contents of the barrel, except at its bore, and the latter is of course engaged by the plug that is forced into the bore of the bung.

Suitable means is provided for securing the sleeve 13 of the bung to the main part 9 of the barrel. As shown the sleeve 13 is externally screw threaded at 18, and a bushing 19 has internal screw threads arranged to engage the threads of the sleeve 13. The bushing 19 has an external flange 21 and the barrel or casing 9 has a rabbeted portion 22 into which this flange fits. By screwing the bushing onto the sleeve, all of the parts of the bushing are secured together.

Barrels of this nature are frequently made in two cup shaped metal portions secured together at the middle of the barrel, and the bushing member 13 is secured to one of these cup members before the two are secured together. The casing is afterward applied, and then the bushing member 19 is screwed onto the sleeve and the whole is clamped in position.

Having thus described my invention, I claim:

1. In a barrel, the combination of a metal lining member having at the bung aperture an integral flange extending inwardly, a sleeve member having at its inner end the bore tapering and reduced externally at such end to form a shoulder a short distance back of the end, the shouldered end of the sleeve being fitted into said flanged aperture of the lining and said members united at their engaging portions, and an inner vitreous coating fused on the lining member and on the exposed portion of the flange

portion of the lining and also covering the said inner tapering end of the bore of the sleeve.

2. In a barrel, the combination of a metal
5 lining member having at the bung aperture an integral flange extending inwardly, a sleeve member having at its inner end the bore tapering and reduced externally at such end to form a shoulder a short distance back of the end, the shouldered end
10 of the sleeve being fitted into said flanged aperture of the lining and said members united at their engaging portions, an inner

vitreous coating fused on the lining member and on the exposed portion of the flange 15 portion of the lining and also covering the said inner tapering end of the bore of the sleeve, said sleeve being externally screw-threaded, and an internally screw-threaded bushing screwing onto said sleeve and having 20 a flange at its outer portion arranged to secure a casing to the said lining member.

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