July 1, 1930. J. D. ZAHM 1,769,481

SHADE HOLDER

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Fig. 1.

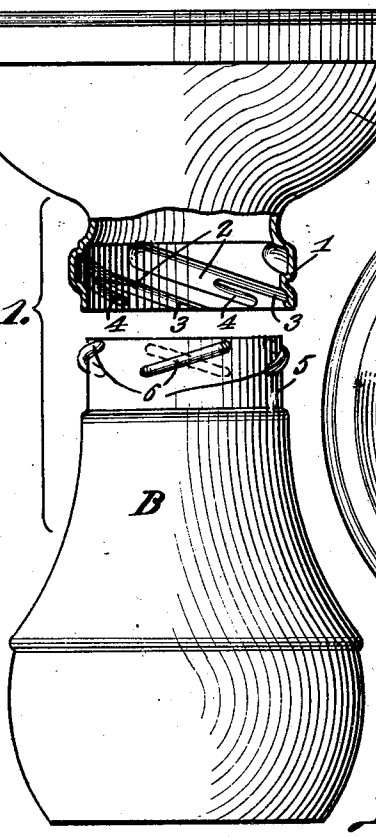


Fig. 2.

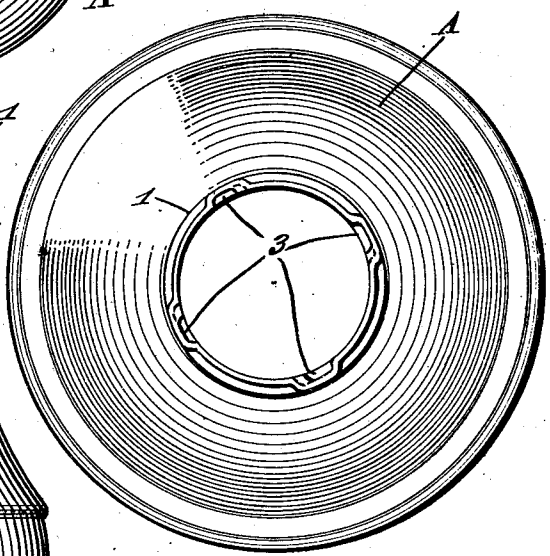
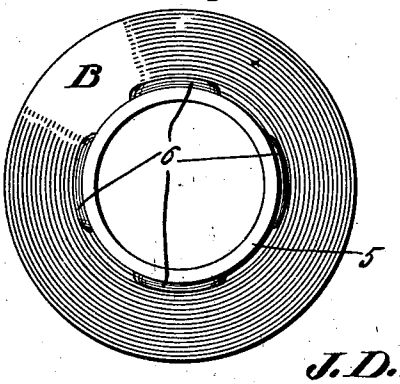


Fig. 3.



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SHADE HOLDER

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Fig. 4.

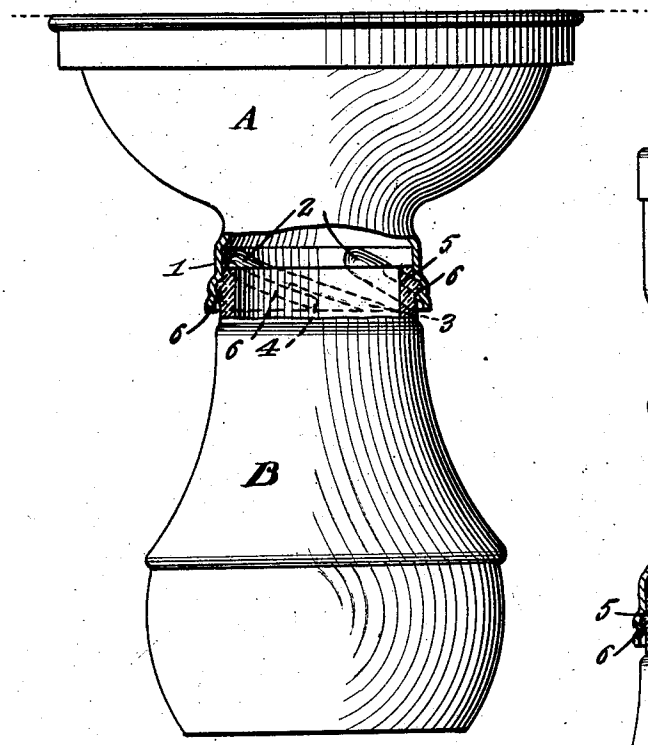


Fig. 5.

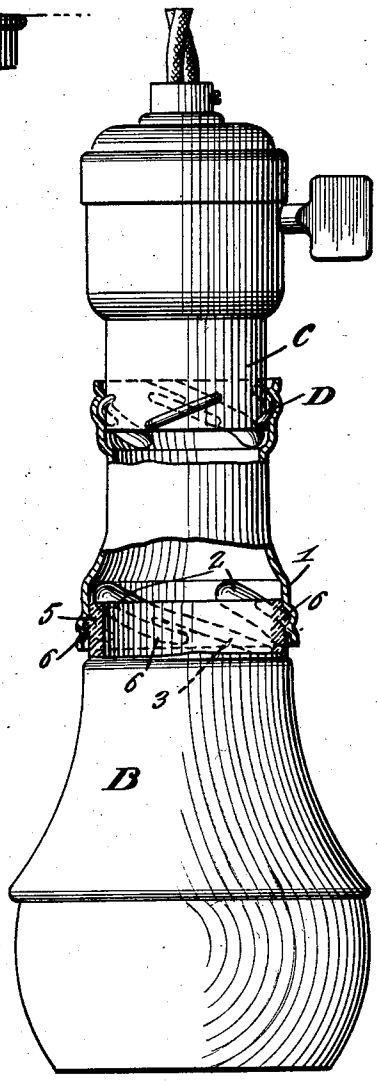
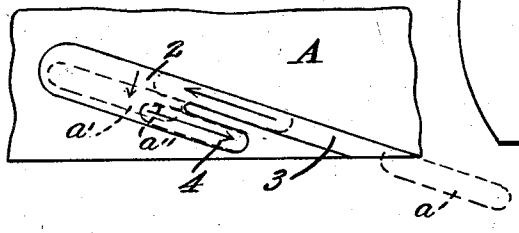


Fig. 6.



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Patented July 1, 1930 1,769,481

UNITED STATES PATENT OFFICE

JOSEPH D. ZAHM, OF LITITZ, PENNSYLVANIA

SHADE HOLDER

Application filed June 3, 1929. Serial No. 368,083.

This invention relates to means for attaching a shade to its holder, the general object of the invention being to provide means whereby the shade can be easily and quickly attached to the holder or detached therefrom without the use of screws, springs or the like and by a partial turning movement of one part in relation to the other.

Another object of the invention is to so form the fastening means that there is no danger of the shade becoming detached through vibrations or the like.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is an elevation, partly in section, showing the shade separated from the holder.

Figure 2 is a plan view of the holder.

Figure 3 is a top plan view of the shade.

Figure 4 is an elevation, partly in section, showing the shade attached to the holder.

Figure 5 is an elevation, partly in section, showing the shade attached to a holder and the holder attached to a lamp socket.

Figure 6 is a diagrammatic view showing how a rib on one part engages the grooves in another part.

As shown in these views, the holder A is formed with a substantially cylindrical lower part 1 which is provided with the diagonally arranged grooves 2 in its inner circumference, the lower end of each groove being of forked construction, with the part 3 passing through the lower edge of the cylindrical part and the part 4 terminating short of said edge.

The shade B is formed with a cylindrical upper part 5 which is provided with the diagonally arranged ribs 6 on its outer periphery, these ribs being of much less width than the width of the major portions of the grooves 2 and of such a width that they can pass into the parts 3 of the grooves 2.

Thus in order to connect the shade with the holder, it is simply necessary to place the upper ends of the ribs 6 in the parts 3 of the grooves 2 and then give the shade a turning movement to cause the ribs to pass into the large parts of the grooves 2. Then a turning movement in the opposite direction of the shade will cause the ribs to pass into the parts 4 of the grooves and as the ends of these parts 4 are closed, the ribs will be held therein and thus the shade will be firmly attached to the holder and cannot become detached therefrom through vibrations or the like, as it is necessary to push upwardly on the shade as it is given a turning movement to cause the ribs to pass out of the grooves 4. Gravity will give the shade its reverse movement to place the ribs in the parts 4, so that it is not necessary to turn the shade by hand in order to place the ribs in said parts 4.

Figure 6 shows a rib about to enter the part 3 of the groove at a and a rib a' in the wide part of the groove and a rib a'' in the part 4 of the groove.

Figure 5 shows a holder atached to a lamp socket C by the same connecting means, shown generally at D.

As will be seen, with this form of connecting device, one member can be easily and quickly attached to another member by a simple turning movement and it will also be seen that screws, springs and other clamping means are eliminated and that a positive locking device is secured which cannot be jarred loose by vibrations or otherwise. The device can be manufactured to sell at a low price and the shade can be made of glass or any other suitable material. The shade holder can be formed of brass, steel or any ductile material and cheaper than when made with springs, screws or the like.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:—

1. In combination with a pair of members, each having a circular part, with the circular part of one member fitting in the circular part of the other, arc-shaped ribs diagonally arranged on the inner circular part and the outer circular part having arc-shaped diagonally arranged grooves for receiving the ribs, each groove having a forked lower part, one portion of which extends through an edge of the circular part to receive a rib of the other part and the other portion of the forked part terminating short of the edge and adapted to receive and hold a rib on the other part.

2. In combination with a pair of members, each having a circular part with the circular part of one member fitting in the circular part of the other member, the inner circular part having arc-shaped diagonally arranged ribs thereon and the outer circular part having arc-shaped diagonally arranged grooves in its inner face, the lower end of each groove being of forked construction, with one portion passing through the edge of the circular part and the other portion terminating short of said edge, said portions receiving the ribs, with the major portion of each groove of such a width as to permit a rib to be passed into the same through one portion of the forked part and then moved into position to enter the other portion of the forked part.

In testimony whereof I affix my signature.

JOSEPH D. ZAHM.