

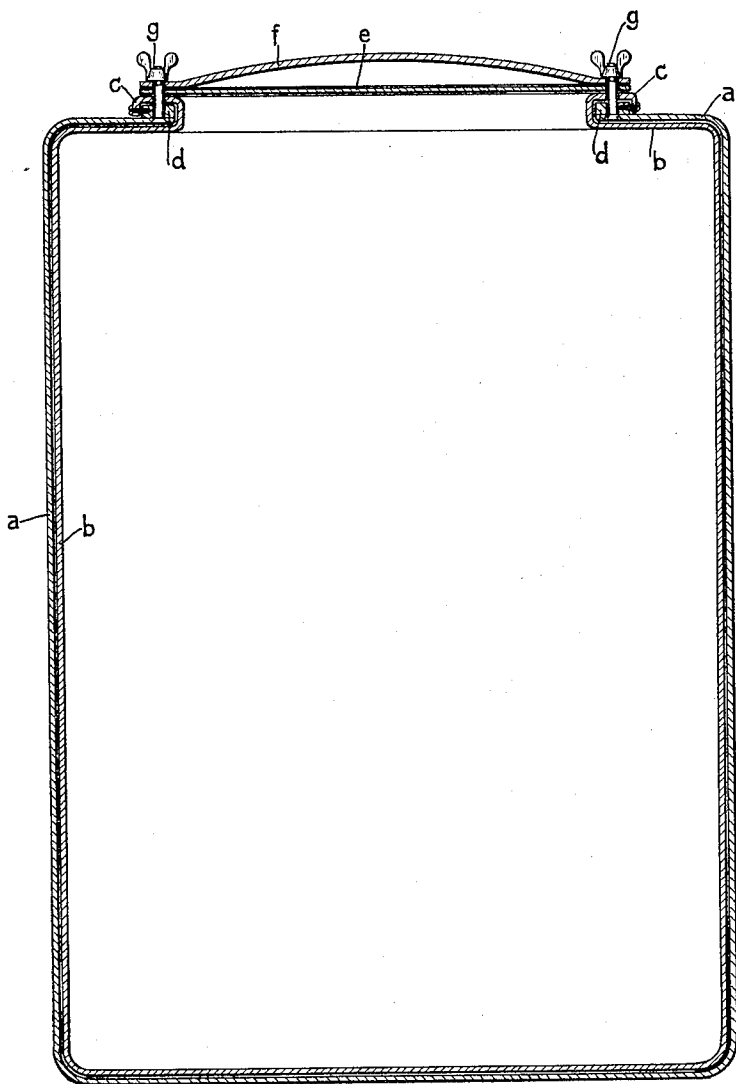
April 16, 1929.

W. ALTHOFF

1,709,701

METAL BARREL

Filed July 11, 1928



Inventor,
Walter Althoff,

by *F. W. Dehner*
Attorney.

UNITED STATES PATENT OFFICE.

WALTER ALTHOFF, OF BOCKENEM-ON-THE-HARZ, GERMANY.

METAL BARREL.

Application filed July 11, 1928, Serial No. 291,956, and in Germany December 16, 1926.

My invention relates to improvements in metal barrels, and more particularly in barrels for storing or shipping heavy acids, alkalis or the like, which are provided with an internal lining such as rubber of a material resisting the action of the acid or alkali on the metal. The object of the improvements is to provide a barrel of this type in which the lining of rubber or the like is not subject to injury by deformation of the metallic wall of the barrel or other influences, and with this object in view my invention consists in providing a lining of rubber or similar elastic material which is in loose engagement with the wall of the barrel, so that it is not injured in case of deformation of the wall, the said lining being preferably secured to the barrel at a few points only, and preferably only at the mouth thereof.

For the purpose of explaining the invention an example embodying the same has been illustrated in the accompanying drawing showing a sectional elevation of the barrel.

In the example shown in the figure the container consists of a metallic barrel "a" and a lining "b" in the form of a bag loosely placed into the barrel "a" and made from elastic material such as rubber. At its top end the lining "b" is reduced in diameter according to the size of the opening of the barrel "a," and its top part is bent outwardly over the margin of the opening of the barrel, the said opening being preferably provided with a ring "d" having the margin of the lining fixed thereto.

When filling the barrel the elastic lining "b" is pressed into loose engagement with the wall of the barrel "a," and it is capable of deformation independently of the wall of the barrel. Therefore, if the barrel is deformed for example by a jar exerted thereon the elastic lining yields to the said deformation, so

that it is not cracked. Thus the access of the liquid to the metallic wall of the barrel is avoided.

For closing the barrel "a" a lid "f" and a disk "e" of rubber are provided, the said parts being fixed in position in any suitable way. In the example shown in the drawing screws "g" provided with wing nuts are provided for this purpose.

In the example shown in the figure the lining "b" is fixed to the barrel "a" only at the opening thereof. But I wish it to be understood that I do not limit myself to this feature, and that in some cases the lining is fixed to other parts of the barrel.

When shipping the filled barrel the relatively expensive linings "b" can be readily removed after emptying the barrel, whereupon a large number of linings can be put together and returned in the form of a bale for being again used in other metallic barrels, the freight charges being thus reduced to a minimum.

I claim:

1. A thin metallic barrel designed to contain materials liable to injure metal by chemical or analogous action said barrel being lined with an internal elastic lining of material resistant to the aforesaid injurious chemical action.

2. A thin metallic barrel designed to contain materials liable to injure metal by chemical or analogous action said barrel being lined with an internal elastic lining of material resistant to the aforesaid injurious chemical action, said lining being in the form of a loose bag detachably connected at its open end to said barrel.

In testimony whereof I have affixed my signature.

WALTER ALTHOFF.