

(No Model.)

C. WITTKOWSKY.
BARREL.

No. 582,250.

Patented May 11, 1897.

Fig. 1.

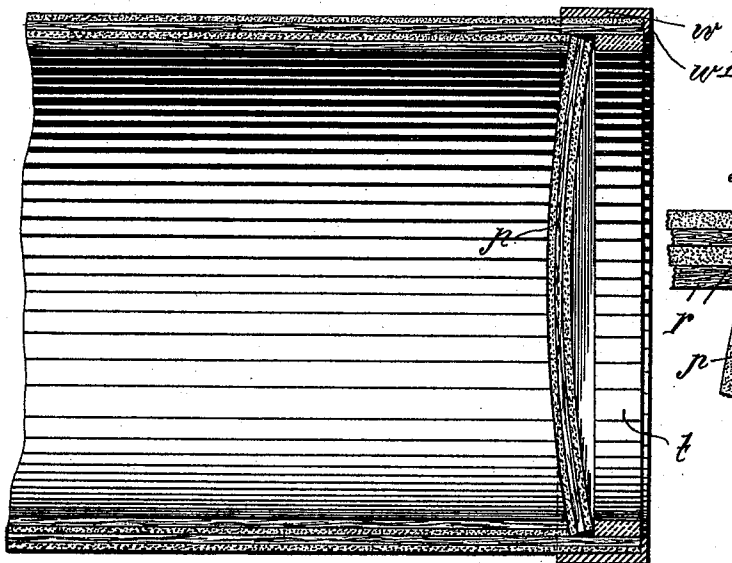
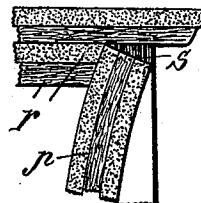


Fig. 2.



Witnesses
Emil Kayser.
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UNITED STATES PATENT OFFICE.

CARL WITTKOWSKY, OF BERLIN, GERMANY.

BARREL.

SPECIFICATION forming part of Letters Patent No. 582,250, dated May 11, 1897.

Application filed February 24, 1896. Serial No. 580,510. (No model.) Patented in England February 4, 1896, No. 2,578.

To all whom it may concern:

Be it known that I, CARL WITTKOWSKY, a subject of the King of Prussia, German Emperor, and a resident of Berlin, in the Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in Barrels and Similar Vessels, (for which a patent has been obtained in Great Britain, No. 2,578, dated February 4, 1896,) of which the following is an exact specification.

My improvements in barrels and similar vessels relate to a special manner of securing the bottoms in position and of making them perfectly tight. I obtain that object by composing the bottom or bottoms of the barrel or similar vessel of at least two crossed veneers, and by making the circumferential surface of the bottom sloping, so that there is formed an annular wedge-like space between that sloping circumferential surface and the respective opposite part of the mantle of the barrel or other vessel, the wedge-like space mentioned receives a packing, as is all more fully described hereinafter.

In order to make my invention more clear, I refer to the accompanying drawings, in which—

Figure 1 shows a longitudinal section through a portion of a barrel having the bottom constructed according to my invention, and Fig. 2 shows a detail of Fig. 1 drawn on a larger scale.

In the form of construction shown the bottom *p* consists of three crossed veneers and is curved to the inside of the mantle. The circumferential surface or mantle-surface of the bottom is made sloping, so as to form a wedge-like space with the projecting portion of the mantle. The bottom is not loosely inserted into the barrel, but is powerfully pressed down upon the seat *r*, which in the case shown is formed by two veneers.

I prefer to apply my improved bottom especially to barrels the mantle of which is also composed of veneers. If the mantle consists, for instance, of four veneers, as shown in the drawings, I prefer to use two of them for the seat, whereas the remaining two project beyond the bottom and form, together with the mantle-surface of the same, the wedge-like space mentioned. This space is filled up with a packing *s*, Fig. 2, consisting of hemp or another suitable material, which, if desired, may be impregnated with pitch, tar, or the like. The packing *s* is pressed down into the wedge-like space as powerfully as possible, and I obtain by this means a practically absolute security against leakage.

I prefer to hold the packing *s* in place by means of a ring *t*, Fig. 1, and I further provide each end of the barrel with an outer iron hoop *w*, the flange *w'* of which takes over the outer veneers of the barrel.

Having thus fully described the nature of this invention, what I desire to secure by Letters Patent of the United States is—

In a barrel, the combination with the mantle, of a bottom or bottoms consisting each of at least two crossed veneers, and having each its circumferential surface made sloping so as to form an annular wedge-like space together with said mantle; and packings inserted into said wedge-like space, for the purpose as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CARL WITTKOWSKY.

Witnesses:

WM. HAUPT,
R. HERPICH.