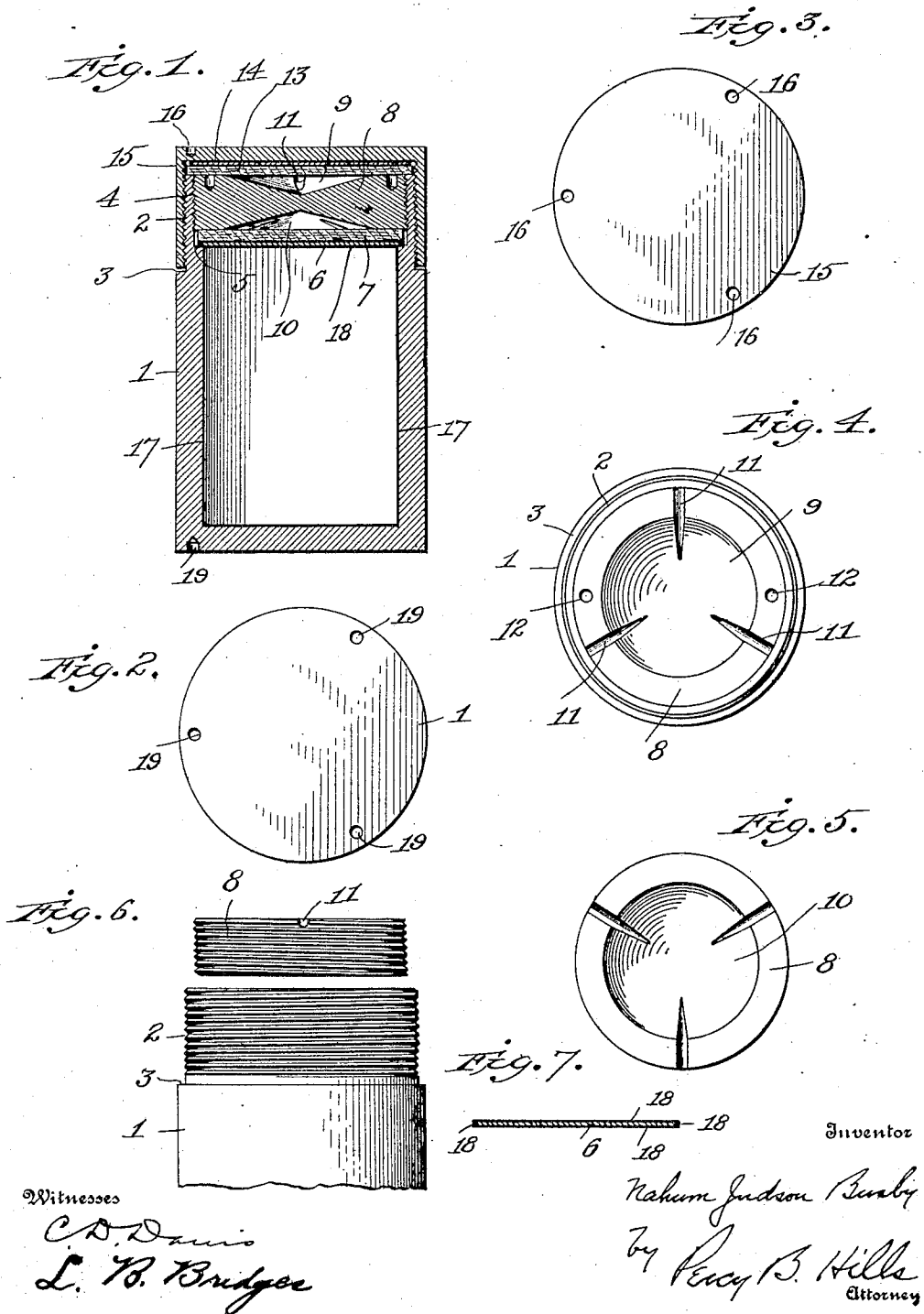


No. 849,352.

PATENTED APR. 2, 1907.

N. J. BUSBY.
SHIPPING CASE.

APPLICATION FILED SEPT. 29, 1905.



UNITED STATES PATENT OFFICE.

NAHUM JUDSON BUSBY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO E. A. G. BUSBY, OF CHELSEA, MASSACHUSETTS.

SHIPPING-CASE.

No. 849,352.

Specification of Letters Patent.

Patented April 2, 1907.

Application filed September 29, 1905. Serial No. 280,660.

To all whom it may concern:

Be it known that I, NAHUM JUDSON BUSBY, a citizen of the United States, residing at Boston, in the county of Suffolk, State of Massachusetts, have invented new and useful Improvements in Shipping-Cases, of which the following is a specification.

My invention relates to devices especially designed for shipping through the mails liquid and semiliquid substances of all kinds, and has for its primary object to provide a receptacle or case, preferably seamless and having a closure readily opened and closed, that will afford a perfect moisture-tight closure.

A further object is to provide an interior surface to the device at all points when closed that will not be affected by such liquids as acids, paints, and the like.

Still another object is to provide means for retaining the case in a fixed position without the use of clamping devices while its closure is being applied or removed.

Certain other minor novel embodiments are included in my improved construction, as will be hereinafter more definitely pointed out and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a central vertical sectional view of my improved case. Fig. 2 is a bottom plan view of the same. Fig. 3 is a top plan view of the outer closing-cap thereof. Fig. 4 is a top plan view of the case with the outer closure removed. Fig. 5 is a detail bottom plan view of the inner closing-plug. Fig. 6 is a side elevation of the upper end of the case with the outer closure removed, the inner closure being also shown in elevation removed. Fig. 7 is a detail sectional view of one of the disks employed with the closures.

Similar numerals of reference denote corresponding parts in the several views.

In the said drawings the reference-numeral 1 denotes the body portion of the shipping-case, the same being preferably composed of metal—such as steel, aluminium, or the like—and being preferably formed by stamping or drawing the same from a blank to produce a seamless article. Said body is cylindrical in exterior outline and is provided exteriorly at its upper end with a comparatively long annular screw-threaded recess 2, terminating in a shoulder 3, as shown. Said body is also interiorly recessed and screw-threaded at 4,

the same terminating in an interior shoulder 5. The inner closure for said body 1 embodies the following parts: a disk 6, preferably formed of lead and resting on the shoulder 5, upon which is placed a pad 7, of felt or other suitable absorbent material, the two being firmly pressed and retained in position by a screw-threaded closing-plug 8, engaging the screw-threads of the interior recess 4. Said closing-plug 8 is dished or cupped centrally on its upper side at 9 and similarly dished or cupped on its under side at 10 and is also provided on each side with a plurality of radial grooves 11, leading from the edge of said closing-plug to said cupped portions, for a purpose hereinafter to be described. Said closing-plug 8 is also provided in its upper surface with apertures 12 to receive a suitable spanner for screwing or unscrewing the same, so that it may be screwed down into position flush with the upper edge of the body 1 of the case, as shown in Fig. 1.

The outer closure embodies the following parts: a pad 13, of felt or other suitable absorbent material, upon which is placed a disk 14, preferably formed of lead, the two being firmly pressed and retained in position by the exterior closing-cap 15, preferably formed of the same material as the body portion 1 and interiorly screw-threaded to engage the screw-threaded recess 2, the exterior diameter of said cap being the same as that of the body 1, whereby the two when assembled present a cylindrical body of even diameter throughout. In the top of said cap 15 I provide a plurality of apertures 16 to receive a suitable spanner for manipulating the same.

In order that the interior of my case may be unaffected by the liquid or semiliquid substance carried therein, I coat the interior of the body 1 up to the shoulder 5 with any suitable non-corrosive substance, as shown at 17, and I also similarly coat the disks 6 and 14, as shown at 18 in Fig. 7.

From the above description it will be understood that with the body 1 filled with any kind of liquid or semiliquid substance and with the outer and inner closures in position, said substance contacts only with the coated interior of the body 1 and with the coated under side of disk 5, the pressure of the closing-plug 8 forcing said disk 6 into practically liquid-tight contact with the interior shoulder 5. Should, however, there be any leakage

past said disk 6, it will first be absorbed by the felt pad 7, the grooves 11 in the under side of the closing-plug 8 tending to lead the liquid toward the cupped portion 10, and any further leakage past the screw-threads of said closing-plug 8 will be at once taken up by the grooves 11 in the upper surface of said plug 8 and led to the cupped portion 9, to be absorbed by the felt pad 13. With these provisions to take up any possible leakage it will be seen that a thoroughly liquid-tight receptacle or case is provided.

In the bottom of the body 1 I provide a plurality of, say, three apertures 19, the same being intended to register with and engage similarly-shaped pins fixed in the table used for charging or discharging the receptacle or case, whereby the body portion 1 will be firmly held against movement without the employment of clamping devices, whereupon by the use of suitable spanners engaging the apertures 12 and 16 in the plug 8 and cap 15, respectively, said parts may be readily placed in position or removed.

While I have described the body 1 and cap 15 as preferably formed of metal, it will be understood that they may be formed of any other suitable material possessing the necessary characteristics to resist compression and to receive the non-corrosive coating 17.

It will be observed that the exterior diameter of the cap 15 is the same as that of the body 1, so that when the two are assembled a label may be readily applied thereto covering the whole exterior surface of the article, and thus acting as a seal to disclose tampering with the contents during transit.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A shipping-case embodying a body por-

tion exteriorly and interiorly recessed and screw-threaded at its open end, a closing-disk resting on the shoulder formed by the interior recess, an absorbent pad resting on said disk, a screw-plug engaging the screw-threads of the interior recess and forcing said pad and disk downward, an absorbent pad resting on said screw-plug, a disk on said pad, and a screw-cap engaging the screw-threads of the exterior recess and exerting pressure on said upper disk and pad.

2. A shipping-case embodying a body portion exteriorly and interiorly screw-threaded at its open end, a screw-plug engaging the interior screw-threads and having its upper surface dished or cupped and grooved from its outer edge to said dish or cup, an absorbent pad imposed on said plug, and a screw-cap engaging the exterior screw-threads of the body portion and forcing said absorbent pad against the screw-plug.

3. A shipping-case embodying a body portion exteriorly and interiorly screw-threaded at its open end, a screw-plug engaging the interior screw-threads and having its upper and under surfaces dished or cupped and grooved from its outer edge to said dishes or cups, absorbent pads lying against each side of said plug, a disk interposed between the lower absorbent pad and the interior of the body portion, and a screw-cap engaging the exterior screw-threads of the body portion and forming an outer closure.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

NAHUM JUDSON BUSBY.

Witnesses:

PERCY B. HILLS,
EDWIN L. YEWELL.