

No. 867,903.

PATENTED OCT. 8, 1907.

L. BARTLETT.
SEAL FOR BOTTLES.
APPLICATION FILED JAN. 18, 1907.

Fig. 1

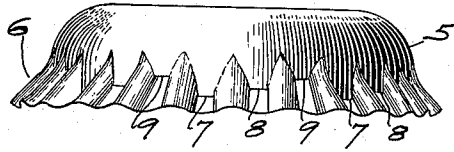


Fig. 2

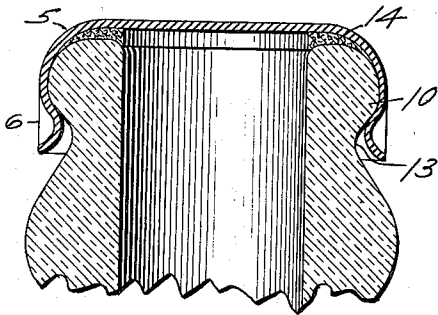


Fig. 3

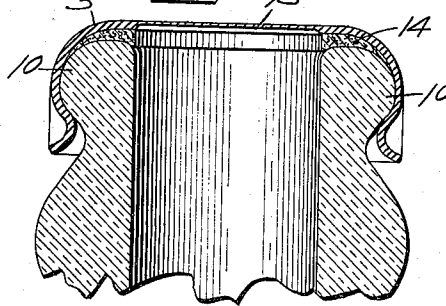
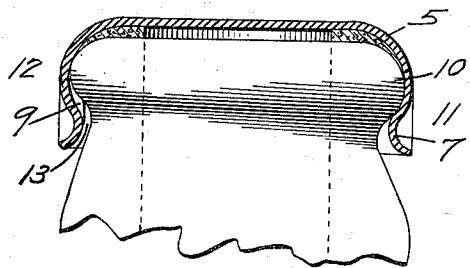


Fig. 4



Witnesses.

Frank Wright
Witness.

Inventor
Leonard Bartlett
By his Attorney
Garry P. Van Wye.

UNITED STATES PATENT OFFICE.

LEONARD BARTLETT, OF NEW YORK, N. Y., ASSIGNOR TO AMERICAN CORK AND SEAL COMPANY, A CORPORATION OF MAINE.

SEAL FOR BOTTLES.

No. 867,903.

Specification of Letters Patent.

Patented Oct. 8, 1907.

Application filed January 18, 1907. Serial No. 352,884.

To all whom it may concern:

Be it known that I, LEONARD BARTLETT, a citizen of the United States, residing at New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Seal for Bottles, of which the following is a specification.

This invention relates to seals for bottles; and has for its object to provide a seal of the class which are clamped on the mouth of the bottle, which will make allowance for any unevenness either in the locking shoulder, or in the thickness of the gasket, or sealing ring.

The invention is illustrated in the accompanying drawing, in which—

Figure 1, is a side elevation of a bottle seal constructed according to my invention; Fig. 2, is a central vertical section thereof applied to a bottle; Fig. 3, is a similar view of a modified form of construction; and, Fig. 4, is a vertical section of a seal applied to a bottle with an irregular locking shoulder.

In the accompanying drawing, the several parts of my invention are indicated by numerals of reference; and in practice I provide a bottle seal similar in every way to the seal known generally as the "Crown" seal, except that the crimps in the skirt instead of being made even, or of equal depth, as in the "Crown" cap, are made of different lengths, or depths, for purposes hereinafter described.

In making the "Crown" cap, it was presupposed that a bottle could be provided having uniform locking shoulders so that if the different scallops, or crimps were of a uniform depth, and proportioned to the sealing disk inclosed in the cap, when the flaring skirt of the cap was forced inward against the locking shoulder by the capping machine head, all of the inward projections of the several scallops would engage the said shoulder, and hold the seal with the lip of the bottle forcibly embedded in the gasket. In fact, however, the locking shoulders on bottles are not uniform in depth, nor are these shoulders uniform throughout their extent on the same bottle so that it often happens when the pressure block of the capping head forces the seal down to embed the lip of the bottle therein, a part of the inward projections of the scallops are below the locking shoulder and will not engage the shoulder when forced inward by the locking head until the return of the pressure block from contact with the cap, when the entire seal will rise until the projections come in contact with the shoulder. In many cases this rising is not sufficient to allow of the escape of all the gases contained in the inclosed liquid providing the same is used within a week or two, although a large percentage of the gas will escape rendering the liquid somewhat "flat". In many cases, however, all the gas is allowed to escape, and the inclosed liquid is lost. In other cases, should

the locking shoulder be a little thicker than the average, the scallops will not be forced downward far enough for the inward projections to engage the locking shoulder at all, when the cap will be driven off the bottle immediately, requiring another seal.

In my invention, as shown in the drawing, 5, represents a bottle cap, having a crimped skirt 6, the several scallops of which are on different planes,—as shown in the drawing, being on three planes so that the inward projections 7, 8, and 9, are at different levels on the skirt, and these several crimps, or scallops run in series so that there are only two scallops intervening between two scallops of the same plane. Consequently, should the locking shoulder 10, of the bottle be uniform in thickness every third, scallop 7, 8, or 9, will engage the shoulder, which will be amply sufficient to hold the seal perfectly tight when the pressure block is removed, as it is not necessary to have every scallop engage the locking shoulder in order to hold the seal in place. Should however, the locking shoulder not be uniform in thickness, as shown at 10', in Fig. 4, where the side 11 is thicker than the side 12, either the crimps, or scallops 7, or 8, will engage the side 11, and the scallops 9, or 8, the side 12, as will be understood, and when the pressure block of the capping head is removed from contact with the seal, there will be no return of the seal to allow of the escape of any gas, but both sides of the seal will be held equally firm, as will be readily understood.

In placing the seal on a bottle, the scallops which are on the planes higher than the scallops required, will have the inward projections flattened on the outer surface of the locking shoulder without interfering with the action of the other scallops, while the projections on the scallops lower than the ones required will simply enter the groove 13, below the locking shoulder. With this improved cap, I may use the usual cork disk, or a cork ring, as 14, and I may also use a cap with a recessed center 15, as shown in Fig. 3, to provide for the puncturing of the cap should a regular tool not be at hand.

It will thus be seen that I have provided a bottle seal which will adapt itself to the different irregularities in the locking shoulders of bottles; and which will be held firmly on the bottle under all circumstances commonly met with in bottling establishments.

While describing my invention in connection with a cap having an unbroken center, and a gasket in the shape of a cork sealing ring, I do not confine the invention to the construction or use of other parts shown, as the stepped skirt may be applied with other gaskets than the ones shown; and may also be applied in connection with the construction shown and claimed in a companion application executed by me this day (Se-

rial No. 352,885, filed Jan. 18, 1907); or it may be used in connection with any construction of cap where a crimped locking skirt is used.

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

1. A seal for bottles comprising a cap, and gasket, said cap having a crimped skirt with the several scallops irregular in distance from the edge of the skirt.
2. In a bottle seal, a cap having a crimped skirt with scallops in different planes.
3. In a bottle seal, a cap having a crimped skirt with scallops in different planes, said scallops being in series.
4. In a bottle seal, a cap having a crimped skirt with scallops in different planes, said scallops being in series advancing from the lowest plane successively to the highest, and the highest succeeded immediately by the lowest.

5. In a bottle seal, a cap having a crimped skirt with the scallops in three different planes, said scallops being in series whereby but two scallops intervene between any two scallops in the same plane, as and for the purpose set forth. 20

6. The herein described seal for bottles comprising a cap and gasket, said cap having a crimped skirt with the scallops in three different planes arranged in series, and running regularly from the highest to the lowest, substantially as and for the purpose set forth. 25

7. In a bottle seal, a cap having a skirt with locking points projecting from the surface thereof, said projections being in different planes, for the purpose set forth. 30

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

LEONARD BARTLETT.

Witnesses:

G. P. VAN WYE,
S. H. SMART.