## C. W. STAPLETON. BOTTLE.

(Application filed Feb. 19, 1900.) (No Model.) Fig. 3, 196 WITNESSES: 196 F. C. Burtis

## United States Patent Office.

CHARLES W. STAPLETON, OF NEW YORK, N. Y.

## BOTTLE.

SPECIFICATION forming part of Letters Patent No. 663,617, dated December 11, 1900.

Application filed February 19, 1900. Serial No. 5,760. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. STAPLE-TON, a citizen of the United States, residing at New York, in the county and State of New 5 York, have invented a new and useful Bottle, of which the following is a specification.

My invention relates to bottles, and especially to that class in which a seal is used to indicate that the contents thereof are genuine; and the objects of my invention are, first, to provide a bottle of special construction, so that when the seal is once removed the bottle will plainly indicate that fact; second, to provide a bottle which will not be materially injured by disengaging or breaking away the part or parts which indicate that the bottle has been sealed and opened, and, third, to provide a seal of simple construction which can be readily removed when the lugs on the exterior of the bottle are broken away, but which cannot be easily removed without breaking said lugs.

I attain the objects of my invention by the mechanism illustrated in the accompanying

drawings, in which-

Figure 1 is an elevation of the neck of a bottle constructed according to my invention and having my improved seal applied thereto. Fig. 2 is a transverse section on the line 2 2 of Fig. 1. Fig. 3 is a view similar to Fig. 3, but showing a modified form of seal. Fig. 4 is a top plan view of the same. Fig. 5 is a view similar to Fig. 1, but showing another form of seal. Fig. 6 is a section on the line 6 of Fig. 5. Fig. 7 is a perspective view of the band used in Fig. 5. Fig. 8 is another modified form of construction. Fig. 9 is a transverse section thereof on the line 9 9 of Fig. 8, and Fig. 10 is a perspective view of the band used in Fig. 8.

In the accompanying drawings the separate parts of my improvement are indicated by numerals of reference, and in the practice of my invention I provide a bottle 11, as shown in Fig. 1, on the neck of which is formed a collar 12 and an annular groove 13, and in the groove 13 and projecting therefrom are one or more lugs 14, which are preferably formed integral with the bottle, and at the point where they are joined to the bottle the lugs are narrowed, so that they may be easily broken off.

The seal shown in Fig. 1 consists of four integral arms 16, each of which is provided with an aperture 17, adapted to fit loosely over the respective lugs 14, and the lower ends of

the arms 16 are beveled exteriorly, as shown 55 at 18. In applying this seal the arms 16 are in the position indicated in dotted lines in Fig. 1, and the seal is passed down over the lugs and the arms are spread just sufficiently to allow the lugs to pass the interior edge of 60 the lower wall of the aperture 17, and as the arms are inclined outwardly the lugs will enter said apertures and center the seal, while the arms are pressed into contact with the bottle by a suitable press or any suitable device. 65 The arms 16 are so proportioned in length that when pressed against the bottle the ends of the arms will abut against the collar 12, so that an instrument cannot be placed under the arms to pry them outward.

It will be observed that the arms 16, as shown, have considerable thickness of metal. This is necessary in order that the same may be held sufficiently rigid to prevent a person with an ordinary instrument bending the 75 same outward to disengage the seal from the bottle without breaking the lugs. I prefer that the arms shall be thick enough and the lugs so proportioned in length that the lugs will not extend to the outer plane of the arms 80 when in position, so that the lugs may not be

broken off by accident.

In using my bottle and seal the bottle is first filled with the liquid or other material which it is intended to hold. It is then 85 corked, and my seal is applied, as stated above. When it is desired to use the contents, by grasping the seal and giving the same a twist or by hitting the side of one of the arms the lugs will be broken off, and the seal can be easily 90 lifted from the bottle and the cork can be removed. As long as the lugs are in place a purchaser may feel assured that he is getting the product of the manufacturer which he intended to purchase. A great advantage in 95 this construction is that the bottle can be used by the purchaser the same as an ordinary bottle after the seal has been removed, so that if he did not wish to use the contents at once he could recork the bottle and set it 100 away until desired; but no manufacturer of fraudulent product could use the bottle to enable him to pass off his product for the genuine product.

While I have described the bottle as having a groove 13, in which the lugs are mounted, I do not confine myself to the use of this groove nor to the use of the collar 12, as the

arms may be made heavy enough so that they cannot be pried out even if the collar were omitted. I have also shown four lugs and four arms; but it is evident that two lugs 5 might be used and two arms, or one lug and three or four arms, or any other combination of lugs nad arms. As aforesaid, the objects of my invention are to provide a bottle which cannot be opened without that fact being in-10 dicated and also to provide a bottle which when opened could be used as long as the purchaser desired and without inconvenience, and these objects I accomplish by placing one or more lugs on the exterior of the bottle, vith a seal of sufficient strength to require that the lugs be broken off before the seal can be removed in ordinary hands.

In Figs. 3 and 4 I have shown a bottle 11', having a top slightly modified from the one 20 shown in Fig. 1 and with a modified form of seal. This seal consists of a band 19, having a plurality of integral arms 16', and in applying this seal the band is placed on the bottle down over the lugs and is then shrunk to 25 the bottle in any manner desired, after which the ends of the arms are brought together over the top of the cork and secured together in any manner desired, or the entire seal and band may be formed out of a piece of metal. 30 by a forming-die, and the band may be shrunk to the neck of the bottle without having the

arms separated at the top.

In Figs. 5, 6, and 7 I have shown still another form of seal. In this form I use a band 35 19a, which is clearly shown in Fig. 7, and the metal is bent outwardly at intervals to form recesses or grooves 20 on the interior of the band, and the top of the band is notched adjacent to each groove 20, as shown at 21, and 40 the arms 16a, which are connected together at the top, are passed down through the grooves 20 after the band has been passed down over the lugs by allowing the lugs to pass through the grooves 20 and then partially rotating the 45 said band, so that it can be drawn up until the lugs enter the notches 21, and the lower ends of the arms 16a are bent outward in close contact with the bottom of the band and are cut off flush with the outer surface thereof. 50 This makes a very secure seal and can be very easily applied and cannot be disengaged, except by cutting the arms or band or by breaking the lugs.

In Figs. 8, 9, and 10 I have shown still an-55 other form of seal in which a band 19b is used. This band is preferably forged, but may be stamped out of sheet metal, and one end is notched, as shown at 22, while the other end is provided with laterally-extending flanges, 60 which are bent over the notched part of the first end to form a housing, as shown at 23. The first end is preferably provided with a shoulder 24, and the second end is preferably bent outward to form a recess 25, so that both 65 ends will abut against shoulders and the in-

sertion of any instrument will be prevented.

It is evident that numerous other ways of making the band and of connecting the same with the straps or arms which pass over the top of the bottle could be easily devised, and 70 the construction would be considerably varied, according to the thickness of material to be used to make the seal. I reserve the right to make all changes, therefore, which fairly come within the scope of my invention. 75

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

Patent, is—

1. A bottle having an external annular groove in the neck thereof with integral lugs 80 protruding therefrom, and a seal mounted on the top of said bottle and extending to engage said lugs, said seal being of sufficient strength to require the breaking of the lugs to remove the same, for the purpose set forth.

2. A bottle having an external annular groove in the neck thereof with integral lugs protruding therefrom, and a seal mounted on the top of said bottle and extending to engage said lugs, said seal being proportioned in 90 thickness, and the lugs being proportioned in length so that the ends of the lugs will lie within the outer plane of the seal, substantially as, and for the purpose set forth.

3. A bottle having an external annular 95 groove in the neck thereof with integral lugs protruding therefrom, and a seal mounted on the top of said bottle, said seal being composed of metal and having arms with apertures in the ends thereof adapted to engage 100 said lugs, and the said arms being proportioned in length so that they will project down beyond the said groove when in engagement with said lugs, as and for the purpose set forth.

4. A bottle having external, integral lugs, 105 and a seal mounted on the top of said bottle, said seal being composed of metal and having arms with apertures in the ends thereof adapted to engage said lugs, said lugs being proportioned in length, and the arms in thick- 110 ness so that the ends of the lugs will lie within the plane of the outer surface of the arms, substantially as and for the purpose set forth.

5. A bottle having four external, integral lugs, and a metal seal mounted on the top of 115 said bottle, said seal comprising four arms forming a spider, and each being provided with an aperture adjacent to the free end thereof adapted to engage respectively the said lugs, the said arms being of sufficient 120 thickness so that the plane of the outer surface will lie beyond the outer end of the lugs, and being of sufficient strength to require the breaking of the lugs to remove the same, substantially as and for the purpose set forth.

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

CHARLES W. STAPLETON.

Witnesses:

PHILIP B. CAVANAGH, J. W. ERNEST.