
A.D. 1885, 7th JULY. N° 8198.

PROVISIONAL SPECIFICATION.

Improvements in Screw Neck Bottles and Stoppers for same.

FREDERIC GEORGE RILEY of 33 South Lambeth Road in the County of Surrey Engineer do hereby declare the nature of my invention for IMPROVEMENTS IN SCREW NECK BOTTLES AND STOPPERS FOR SAME to be as follows:—

To construct a screw stoppered bottle or jar so that it can be readily filled when
5 used for the purpose of containing either aerated or non aerated liquids and also to
admit of its being easily opened or closed and yet be used for other purposes if
desired. I employ a bottle having a screw formed on the inside of the mouth or
neck and the outside of the mouth or neck is tapered or coned with an increasing
10 diameter so as to form a joint on the outside of the mouth instead of the top when
placed against the rubber mouth piece of the bottling machine. The stopper which
may be made of any suitable material; instead of projecting over the top of the
bottle, is at its largest diameter smaller than the mouth of the bottle. On the
upper part of the thread of the stopper I form a slightly conical recess extending
15 to or below the bottom of the thread, in which I place the rubber jointing ring;
when the stopper so formed is screwed in, the thread on the bottle forms a thread
on the yielding rubber arresting it from going too far and preventing the bursting
of bottles. On the top of my stopper I form a thumb piece projecting above the
bottle, and of such a shape as to allow of its being gripped by a suitable device for
20 holding for the fingers when it is desired to obtain access to its contents.

Dated this 6th day of July 1885.

FREDERIC GEORGE RILEY.

[Price 6d.]

COMPLETE SPECIFICATION.

Improvements in Screw Neck Bottles and Stoppers for same.

FREDERIC GEORGE RILEY of 33, South Lambeth Road in the County of Surrey Engineer, do hereby declare the nature of my invention for IMPROVEMENTS IN SCREW NECK BOTTLES AND STOPPERS FOR SAME and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

To construct a screw stoppered bottle or jar, so that it can be readily filled when used for the purpose of containing either aerated or non aerated liquids; and also to admit of its being easily opened or closed, and yet be used for other purposes if desired.

I employ a bottle having a screw formed on the inside of the mouth or neck, and the outside of the mouth or neck is tapered or coned with an increasing diameter so as to form a joint on the outside of the mouth, instead of the top, when placed against the rubber mouthpiece of the bottling machine.

The stopper which may be made of any suitable material, instead of the upper portion of it projecting over the sides of the mouth of the bottle, is at its largest diameter smaller than the mouth of the bottle. On the upper part of the thread of the stopper I form a slightly recess coned in centre extending to or below the bottom of the thread in which I place the rubber jointing ring; when the stopper so formed is screwed in the thread on the bottle, it may form a thread on the yielding rubber or when the upper part of thread in the neck of the bottle is not continued to the mouth and a slight taper is provided on it, the rubber may make the joint here, arresting the stopper in either case from going too far and preventing the bursting of bottles. On the top of my stopper I form a projection or thumb piece of such a shape as to allow of its being gripped by a suitable device for opening and closing when filling the bottle in a machine, and providing a secure hold for the fingers when it is desired to obtain access to its contents.

In order to make my invention understood I will more particularly describe the same referring to the drawings annexed.

Figs. 1 and 2, are elevations of the stopper and neck of the bottle in section.

Figs. 3 and 4, are plans of same.

Figs. 5 and 6 are sectional elevations of the stopper showing the conical recess with rubber ring in position.

A is the projection or thumb piece.

B is the recess coned in centre on stopper extending to or below the bottom of the thread C in which is placed the rubber jointing ring *b*.

C is the thread formed on the stopper which is formed slightly tapering and continued to the recess.

D. is the bottle or jar mouth piece.

E is the aperture of the bottling machine *d* and *d* 1 the increasing diameter of the outer circumference of the bottle neck.

The projection A may be modified or altered as desired, the shape here shown is that which is most readily held in the gripping device of an apparatus for filling

Riley's Improvements in Screw Neck Bottles and Stoppers for same.

bottles with aerated or non aerated liquids and closing same which I have described in my application No. 8447 dated 13th July 1885 and for which I have obtained provisional protection.

Having now particularly described and ascertained the nature of my said
5 Invention and in what manner the same is to be performed I declare that what I claim is

1. The construction of a screw stopper, for a bottle or jar having an internal thread on its mouthpiece or neck, in which the largest diameter of the stopper does not exceed the largest diameter of the mouth piece.
- 10 2. The formation of a suitable thumbpiece or projection for enabling the stopper to be securely gripped by a suitable device for opening and closing when filling the bottle in a machine.
3. The formation of a recess coned in centre for receiving the jointing ring as herein described.
- 15 4. The combination of the projection with the recess coned in centre and the formation of a stopper such as herein described and shown.

Dated this Twenty fourth day of September 1885.

FRED. G. RILEY.

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1885.

FIG. 1.

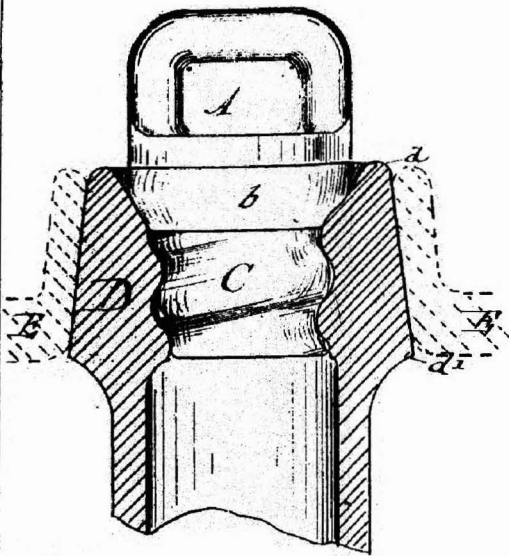


FIG. 2.

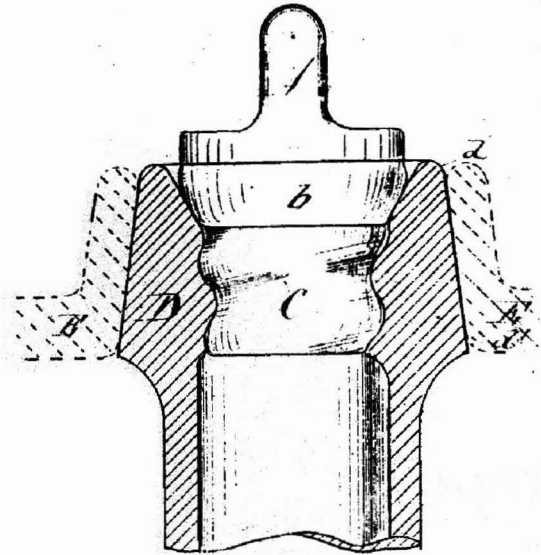


FIG. 3.

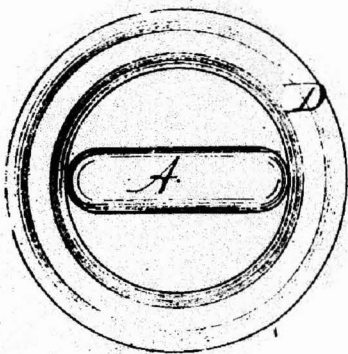


FIG. 4.

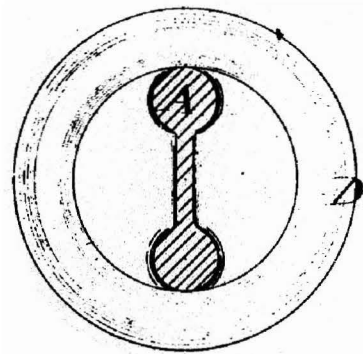


FIG. 5.

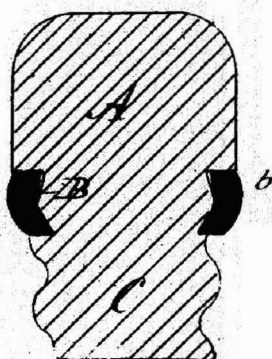


FIG. 6.

