

No. 619,878.

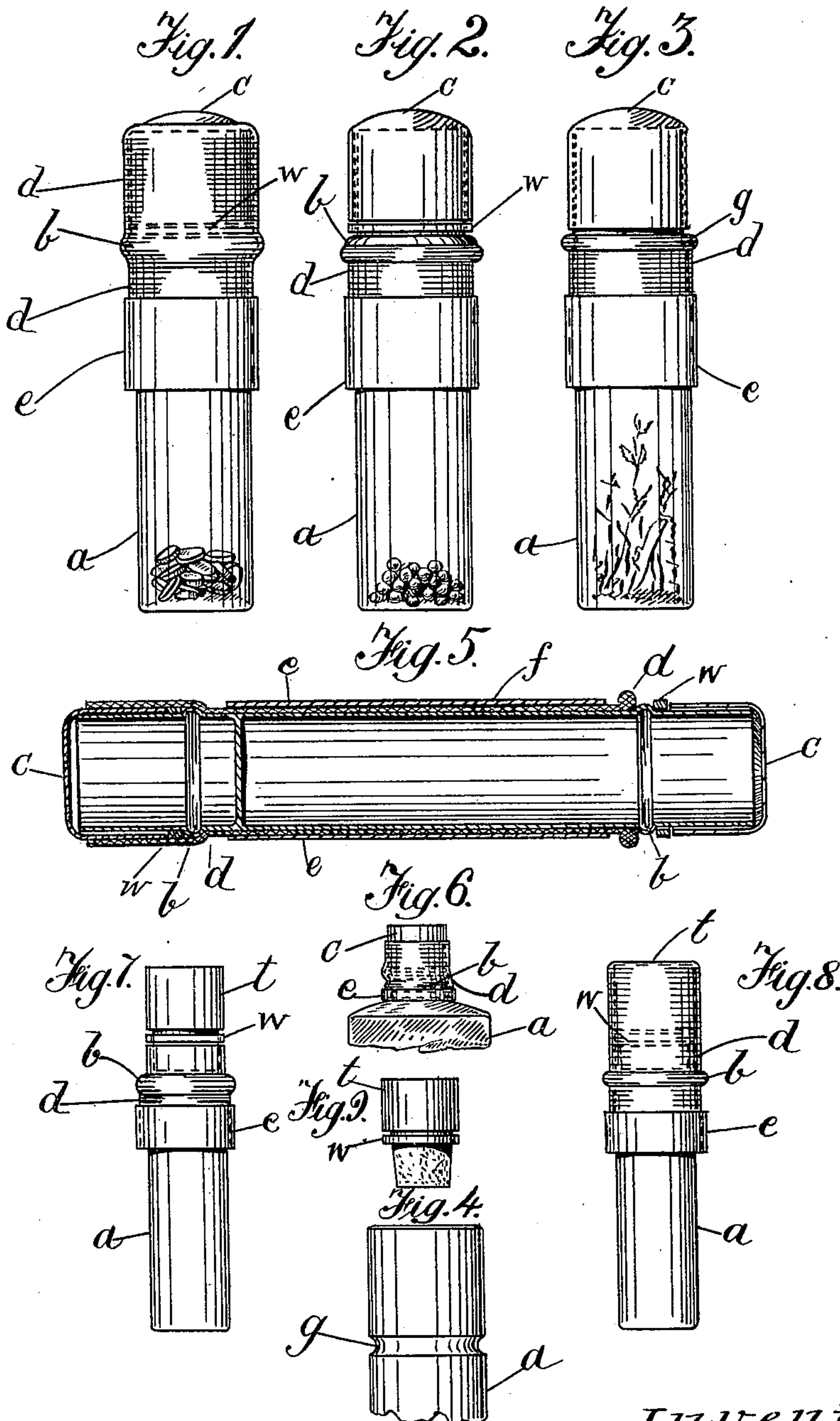
Patented Feb. 21, 1899.

A. DUNHILL.

MEANS FOR EXCLUDING AIR FROM TINS, BOTTLES, JARS, OR OTHER RECEPTACLES.

(Application filed Apr. 29, 1898.)

(No Model.)



Witnesses:
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By 

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UNITED STATES PATENT OFFICE.

ALFRED DUNHILL, OF LONDON, ENGLAND.

MEANS FOR EXCLUDING AIR FROM TINS, BOTTLES, JARS, OR OTHER RECEPTACLES.

SPECIFICATION forming part of Letters Patent No. 619,878, dated February 21, 1899.

Application filed April 29, 1898. Serial No. 679,264. (No model.)

To all whom it may concern:

Be it known that I, ALFRED DUNHILL, manufacturer of cycle accessories, a subject of the Queen of Great Britain, and a resident of 145 to 147 Euston road, in the city of London, England, have invented a certain new or Improved Means for Excluding the Air from Tins, Bottles, Jars, or other Receptacles, (for which I have applied for patents in Great Britain, No. 24,518, bearing date October 22, 1897, and in Germany, Kassenbuch No. 49,460, bearing date March 29, 1898,) of which the following is a specification.

My invention relates to a new or improved means for practically excluding (or nearly so) the air from tins, bottles, jars, and other receptacles, or for preventing the contents of such receptacles for evaporating, and so preserving them.

The invention, though preferably applied to receptacles of the shape hereinafter described, may also be applied to any-shaped receptacle of glass, metal, or other suitable substance.

In carrying my invention into practical effect I fit onto the neck or other convenient part of such receptacle a tightly-fitting sleeve of rubber or like material. When the receptacle is closed, this rubber or like sleeve extends over the cap, stopper, or the like forming the cover thereof, covering the line of junction between the cap and receptacle, and thus preventing the ingress or egress of air or other gas to or from the receptacle. When it is required to open the receptacle, the rubber sleeve is rolled back from the cap or stopper and retained in its withdrawn position by means of a ridge or groove on the receptacle or by a ridge formed on the said sleeve itself, the cap or stopper being now exposed and capable of removal in the ordinary way. That part of the rubber sleeve which is to remain immovable may be firmly retained in position on the receptacle by means of a band or clip of paper or other substance, such band or clip serving also as a label or bearing an advertisement or any other written matter, if required, or instead of such band a metal wire may be used to effect the same purpose.

I will now proceed to further describe my invention in connection with the accompanying drawings, in which the same letters of ref-

erence indicate like parts in the various figures.

In the drawings, Figure 1 is a side view of the invention; Fig. 2, a similar view with the sleeve rolled back. Fig. 3 is a similar view of a modification. Fig. 4 is a detail of Fig. 3. Fig. 5 is a longitudinal sectional view of a modification. Fig. 6 is a detail of a modification. Figs. 7 and 8 are side views of a bottle, showing the sleeve in different positions. Fig. 9 is a view of a stopper.

Fig. 1 represents a cylindrical glass bottle *a*, (suitable for containing medicinal tabloids, smelling-salts, or other like articles,) having a ridge *b* formed near its open end, which latter is closed by a metal, glass, or other suitable cap *c*, a rubber or like ring or washer *w* being placed on the bottle between the edge of the cap *c* and the ridge *b*. Tightly fitting this bottle for part of its length and also extending over the sides of the cap *c*, so as to cover the line of junction between the latter and the bottle *a*, is the rubber or like sleeve *d*. The lower end of this sleeve may be secured in position by the band of paper or other suitable substance *e*, which may serve also as a label or carry an advertisement or other matter, or this band *e* may be replaced by a metal wire.

Fig. 2 is a view of the cylindrical bottle *a*, having the rubber sleeve *d* rolled back below the ridge *b*, so that the cap *c* can be removed.

Fig. 3 shows a cylindrical bottle *a*, having the rubber sleeve *d* rolled back and retained by a groove *g*, so that the cap *c* can be removed.

Fig. 4 shows the top of a cylindrical bottle *a*, having a groove, such as *g*, formed therein.

Fig. 5 is a longitudinal sectional view of a cylindrical metal case *f*, suitable for containing a repair outfit for the pneumatic tires of cycles, fitted with my invention. This case is fitted with a cap *c* at either end and is incased in a tightly-fitting rubber or like sleeve *d*, secured in position by a band of paper or the like *e*, which latter may also serve as a label or the like, as previously explained. In this figure the sleeve *d* is shown covering the sides of the cap at one end of the case *f*, but rolled back from the cap and behind the ridge *b* at the other end of the case. It is obvious that either one or both of the ridges *b* in this fig-

ure might be replaced by a groove, such as *g*, Fig. 4, or that the rubber sleeve might be replaced by two shorter rubber sleeves, one at each end of the receptacle.

5 Fig. 6 shows my invention applied to a scent-bottle.

Fig. 7 shows a bottle *a*, having a rubber sleeve *d* rolled back over a ridge *b* formed thereon and fitted with a stopper *t*, the end
10 of this stopper fitting into the bottle being reduced and having a rubber or like washer *w* placed thereon.

Fig. 8 shows a similar bottle and stopper to that shown in Fig. 7; but the rubber or like
15 sleeve *d* is rolled up over the stopper *t*, so as to preserve the contents of the bottle.

Fig. 9 is a view of a stopper *t* and washer *w*, such as is shown in use in Figs. 7 and 8.

A ridge, such as *b*, or a groove, such as *g*, is
20 found very useful to retain the portion of the rubber or like sleeve when rolled back, so as

to expose the cap or stopper; but I may also apply my invention to receptacles not having such ridge or groove. Moreover, the rubber or like sleeve may, if preferred, be applied to
25 receptacles without the use of a band, such as *e*, or a wire or its equivalent.

What I claim is—

In combination with a bottle, having a ridge or groove, a stopper, a rubber or like sleeve,
30 and a band for securing it to the outside of the bottle, the said sleeve extending over the rib or groove and over the joint of the cap and adapted when rolled back to be held by
35 the said rib or groove, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ALFRED DUNHILL.

Witnesses:

WALTER J. SKERTEN,
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