

983,437.

M. GRAY.
RECEPTACLE.
APPLICATION FILED NOV. 9, 1909.

Patented Feb. 7, 1911.
2 SHEETS—SHEET 1.

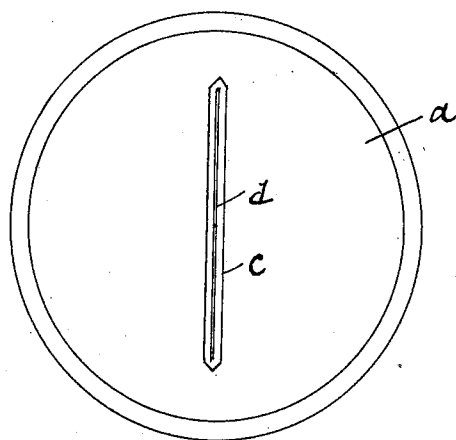


Fig. 1.

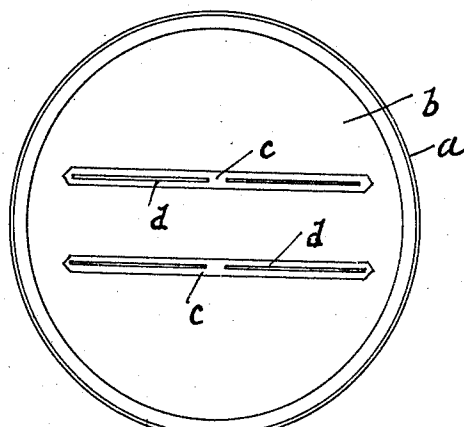


Fig. 4.

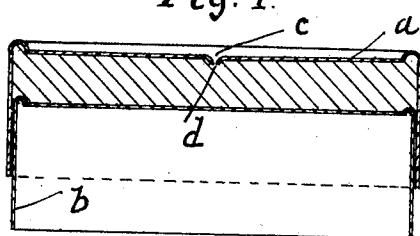


Fig. 3.

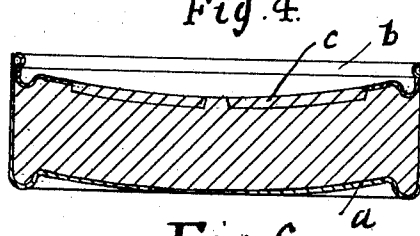


Fig. 6.

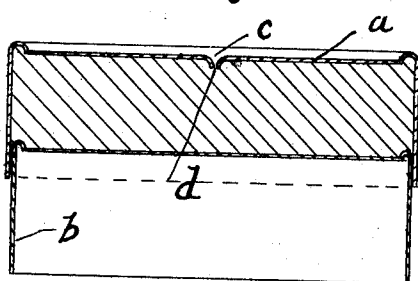


Fig. 2.

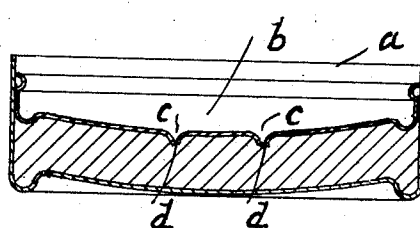


Fig. 5.

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2 SHEETS—SHEET 2.

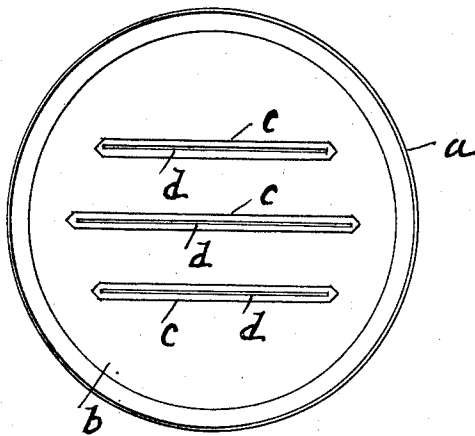


Fig. 7.

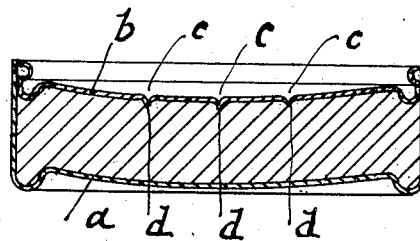


Fig. 8.

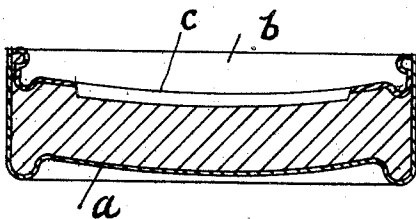


Fig. 9.

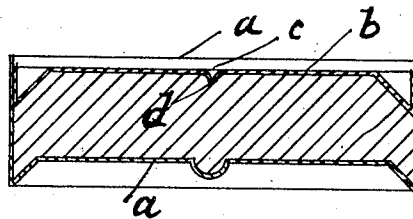


Fig. 10.

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UNITED STATES PATENT OFFICE.

MATTHEW GRAY, OF KINGSTON-UPON-HULL, ENGLAND, ASSIGNOR TO HARGREAVES
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RECEPTACLE.

983,437.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed November 9, 1909. Serial No. 527,008.

To all whom it may concern:

Be it known that I, MATTHEW GRAY, a subject of the King of Great Britain, residing at Fernholme, Holderness Road, in the city and county of Kingston-upon-Hull, England, have invented new and useful Improvements in Receptacles, of which the following is a specification.

This invention consists in a box, canister, or other similar receptacle for semi-liquids, pastes, powders and the like having one or more slits or other suitable apertures formed in the receptacle or in the closure thereof, the said aperture or apertures being normally closed by the elasticity of the material from which the receptacle or closure is made, but which open when the closure or a suitable portion of the receptacle is pressed inward and allow a certain portion of the contents of the receptacle to exude or pass through the said aperture or apertures when required for use.

My invention is illustrated by the accompanying drawings in which:—

Figure 1 is a plan of a receptacle constructed according to this invention. Fig. 2 is cross section of the same when full. Fig. 3 is cross section of the same when partially emptied of its contents. Fig. 4 is a plan of a receptacle constructed according to this invention having apertures in the closure thereof. Fig. 5 is section of the same across the slits. Fig. 6 is section of the same through the slits. Fig. 7 is a plan of a receptacle constructed according to this invention having three apertures in the closure thereof. Fig. 8 is cross section of the same. Fig. 9 is a section of same through the slits. Fig. 10 is cross section of another form of receptacle constructed according to this invention.

The same letters denote the same parts throughout.

According to this invention I form the receptacle *a* and the closure thereof as shown in all the figures by raising or stamping from sheet metal, such as tin plate, or the receptacle and closure may be made from any other suitable material such as celluloid, vulcanite and the like, so long as the slitted portion thereof is of a "springy" or elastic nature.

As shown by Figs. 1, 2 and 3, the receptacle *a* and the closure *b* are made from sheet metal, the receptacle *a* being provided with

a groove *c* in which is formed a slit *d*. The closure *b* is made to slide in the receptacle tightly so as to prevent the escape of the contents from, and as much as possible access of air to, the receptacle.

When the receptacle is full the closure *b* is in the position shown by Figs. 2 and 10, and supposing the contents to be paste black lead, boot polish, polish for linoleum, parquetry flooring polish, or other pastes or viscous substances, the contents may be extracted in the desired quantity when required for use by placing the receptacle on a table or floor with the closure *b* downward as shown by Figs. 2 and 3 or upward as shown by Figs. 4 to 10 and pressing on the slitted portion with a brush or cloth, the pressure causing the slit *d* to open and allow a small quantity of the contents to exude on to the brush or cloth. The closure *b* in all cases recedes into the receptacle as the contents thereof are removed, as is clearly shown by the drawings.

The aperture *d* is hermetically sealed when the receptacle and its contents are ready for sale by means of a suitable varnish and in some cases by the manufacturer's or retailer's label.

When in use for goods other than powders the aperture *d* is sealed after a portion of the contents has from time to time been removed by the small quantity of the contents which remains in the groove *c* and aperture *d*, more particularly in the case of substances which contain volatile ingredients, as the evaporation of the said volatile ingredients causes a film of solid material to effectually seal the aperture and prevents further evaporation of the volatile ingredients. In such cases the point of contact between the receptacle and its closure is also similarly sealed.

As shown by Figs. 4, 5, 6, 7, 8, 9 and 10 the slits or other apertures are formed in the closure *b* instead of in the receptacle *a*, the closure shown by Figs. 4, 5 and 6 having two grooves and slits or other apertures therein, but the closure shown by Figs. 7, 8 and 9 is provided with three grooves and apertures. The contents of the receptacles in which apertures are formed in the closure are caused to exude by pressing the closure inward.

In all cases to prevent waste of the contents the top or bottom of the receptacle

and the inner portion of the closure may be made of similar contour as shown. The contour of that portion in which the slits or other apertures are formed must be such
 5 that normally the apertures are closed, but that pressure on the said portion causes the said apertures to open to allow the contents of the receptacle to exude or pass as required for use.

- 10 If the receptacle is made with a depression in the bottom as shown by Fig. 10 I provide means by which the groove in the closure and the depression are kept in alignment, such as vertical grooves in the circumference of the receptacle and closure for
 15 example.

Receptacles constructed according to this invention may be made of any suitable size and shape and the apertures may be of any
 20 suitable kind always provided that such apertures are normally closed and capable of being opened by pressing the portion of the receptacle or closure which contains the apertures inward.

- 25 Instead of forming one aperture as shown I may form more than one slit in each groove at any suitable part thereof.

When using my receptacles for powders I may stiffen the closure at one side of the
 30 slit by forming a corrugation therein, in

which case the corrugated portion of the closure would remain rigid and permit the other portion alone to be depressed toward the powder and on tilting the receptacle the powder would be delivered on to the de- 35 pressed portion of the closure.

I claim:—

1. In a device of the class described, in combination, a receptacle member and a closure member therefor, one of said mem- 40 bers being formed of elastic material and having an aperture formed therein, the elasticity of the material maintaining the aperture normally closed, and permitting the aperture to be opened when pressure is ap- 45 plied to the said member.

2. In a device of the class described, in combination, a receptacle member and a closure member therefor in telescopic rela- 50 tion to one another, one of said members being formed of elastic material and having an aperture formed therein, the elasticity of the material maintaining the aperture normally closed, and permitting the aperture to be opened when pressure is applied to 55 the said member.

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Witnesses:

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