

(No Model.)

2 Sheets—Sheet 1.

A. AKESON.
EVACUATING DEVICE.

No. 584,253.

Patented June 8, 1897.

Fig. 1.

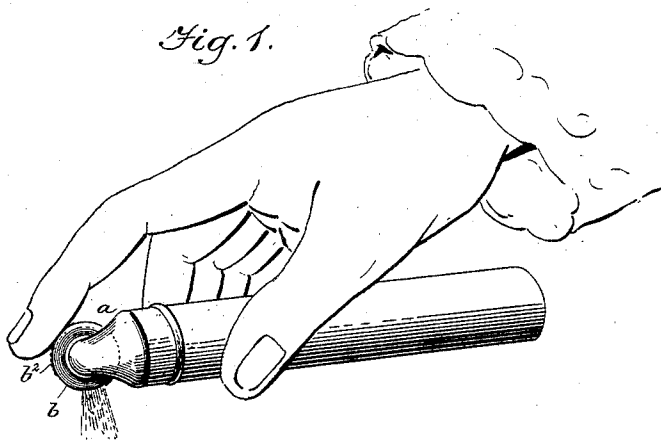


Fig. 3.

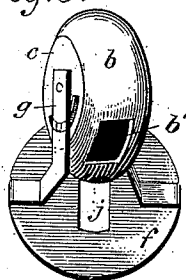


Fig. 2.

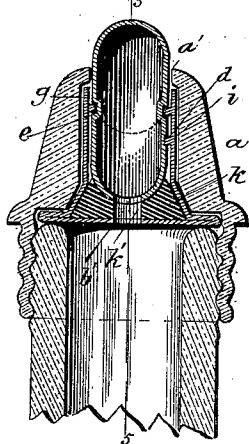


Fig. 5.

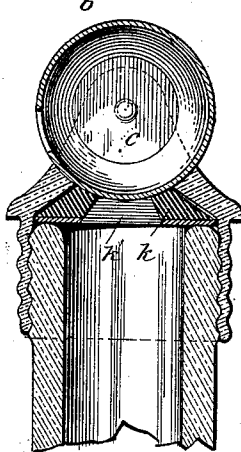
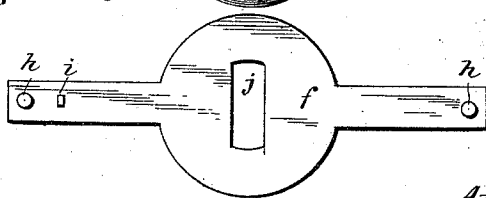


Fig. 4.



WITNESSES:

J. E. Luskett
Geo. Wallace

INVENTOR

Anders Akeson

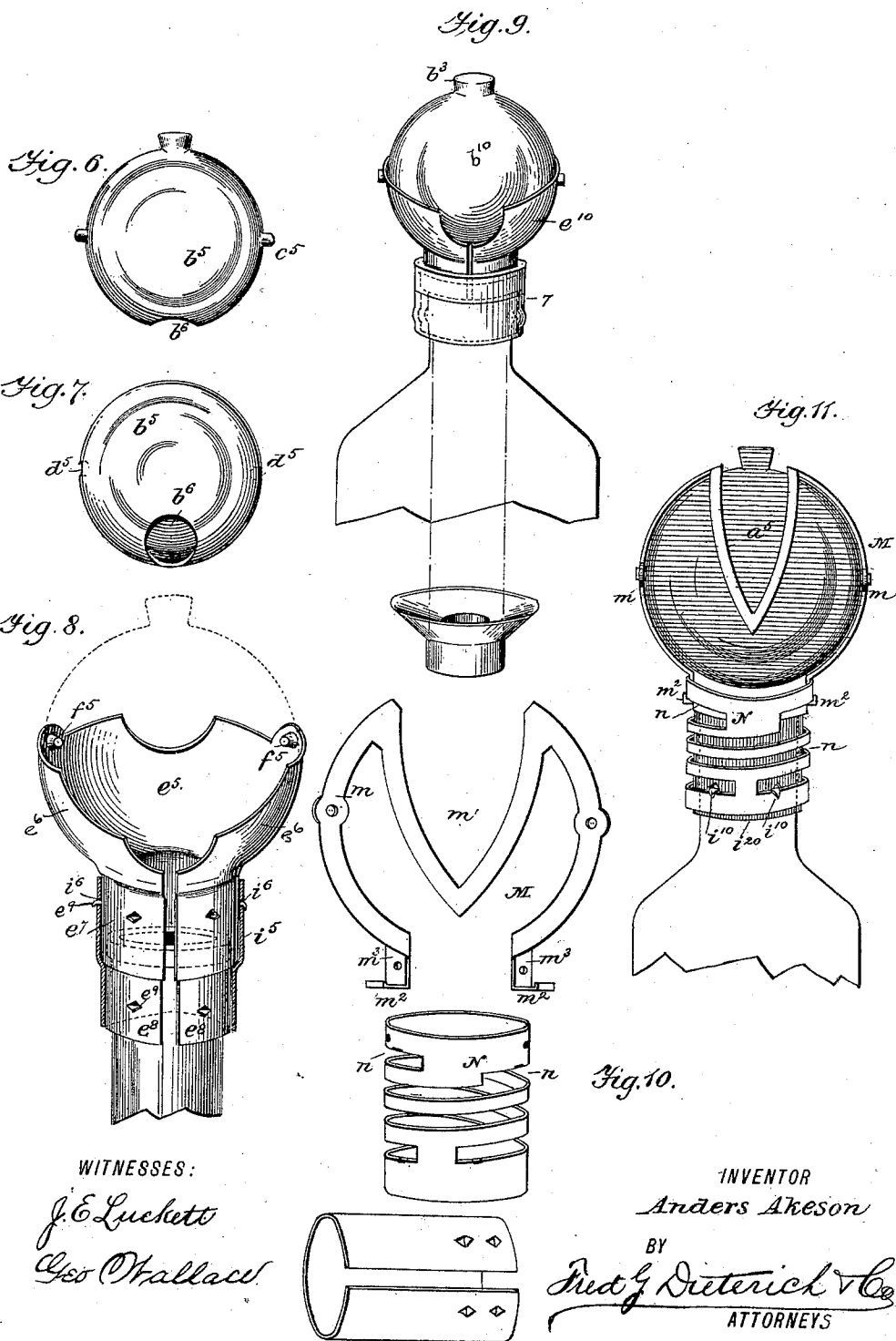
BY

Fred G. Dieterich & Co.
ATTORNEYS

A. AKESON.
EVACUATING DEVICE.

No. 584,253.

Patented June 8, 1897.



UNITED STATES PATENT OFFICE.

ANDERS AKESON, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF ONE-HALF TO WALTER VOSE LAWTON, OF SAME PLACE.

EVACUATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 584,253, dated June 8, 1897.

Application filed October 8, 1896. Serial No. 608,298. (No model.)

To all whom it may concern:

Be it known that I, ANDERS AKESON, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and Improved Evacuating Device, of which the following is a specification.

My invention is in the nature of an attachment adapted to be conveniently connected to a bottle, box, or other receptacle for holding powdered articles, tea, or coffee, &c., and has for its object to provide an attachment for this purpose of a very simple and inexpensive nature which can be readily attached to the bottle or other receptacle, which can be readily manipulated, and effectively serve for its intended purposes.

My invention also has in view other objects which will hereinafter be made clear; and it consists in an evacuating device embodying the peculiar combination and novel arrangement of parts, such as will be first described in detail and then be specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a view illustrating my invention as in use. Fig. 2 is a vertical section of a bottle with my improvements applied, illustrating the preferred form of connecting same to the bottle. Fig. 3 is a detail view illustrating the manner of supporting the rotary drum. Fig. 4 is a plan view of the supporting disk or band before the arms are bent up. Fig. 5 is a transverse section taken on the line 5 5 of Fig. 2. Figs. 6 and 7 illustrate the evacuator-drum formed of glass globes. Fig. 8 illustrates the means for securing such glass globes to the bottle or receptacle. Fig. 9 illustrates a further modification, and Figs. 10 and 11 illustrate another form of supporting and securing means for holding the drum.

Referring now to the accompanying drawings, in which like letters indicate like parts in all the figures, *a* indicates an exteriorly-threaded top piece or stopper made hollow and provided with a slotway or opening in the top, through which the rotating drum or receptacle *b* projects, as clearly shown. This drum *b* has preferably an oval periphery and flat sides *cc*, one or both of which have a curved guide-groove *d*, while both sides have pivot-holes *e*.

By referring now more particularly to Figs.

3 and 4 it will be observed the drum or receptacle *b* has a single opening *b'*, which alternately forms the receiving and discharge port. This drum *b* is held to rock between a pair of vertical guides *g g*, bent up from a sheet-metal circular disk or band *f*, which arms have inside pintles *h h*, which fit the openings or sockets *e* in the drum, one of such arms *g* also having a stud *i*, adapted to project into the groove *d*, as clearly shown.

The band *f* has a slot *j* for the passage of the contents of the bottle, and on its upper face it has a washer *k*, of rubber, cork, or other yielding material, which forms a friction-bearing for the under side of the drum, such washer also having an opening *k'* for the free egress or ingress of the bottle and drum contents, such washer being made of the contour of the drum *b*, as shown in Fig. 5, so as to closely adhere to the periphery of the drum and hold it to its adjusted position by friction.

The band *f* is of such a diameter and the arms *g* are so bent up in practice (see Fig. 3) that the same can be readily shoved up into the threaded stopper or top *a*, the arms *g* extending nearly to the top of the opening *a'*, the band *f* engaging a shoulder or stop portion, which when the stopper *a* is screwed down onto the bottle serves to clamp the holder securely in position.

After the drum-holder has been set in place the drum can be quickly placed in position by forcing it down into the open way *a'*, its side faces forcing the spring-arms *g g* back until the pintle-openings *e e* and the groove *d* engage the pintles or studs *h* and *i*, at which time the lower face of the drum will be held in a tight frictional contact with the washer *k*.

The several parts being thus adjusted it is manifest that by holding the bottle or vessel and turning the drum by pressure of the finger, as shown in Fig. 1, the drum having its upper face grated or roughened, as at *b²*, (or provided with a stop-lug *b³*), the opening in the drum will be moved to a position to readily discharge the contents of the drum, it being obvious that the opening to the bottle will at this time be cut off.

In Figs. 6 and 7 I have illustrated the drum in the nature of glass globes *b⁴*, having a single opening *b⁶* and knob *b³* for turning and pintles *c⁵* or pintle-recesses *d⁵*. When this

form of drum or evacuating-chamber is used, I prefer to hold the same in a spring-metal cup e^5 , having its side members e^6 provided with pintles f^5 (or recesses) for a ready pivotal connection of the globe b^5 . In this construction the cup e^5 is split at one side and provided with a shank or collar having an upper and lower portion e^7 e^8 , the lower part being of a reduced diameter, whereby when slipped over the neck of a bottle the same will readily slip under the bottle-neck, as shown.

i^5 indicates a collar which is forced up and sprung over the pendent split end of the cup and serves to securely clamp such end to the bottle-neck, the said collars i^5 having slots i^6 to receive projections e^9 on the cup end e^7 and e^8 .

In Fig. 9 is shown another form of my improvement. In this case the globe b^{10} has its pintles held in the split cup e^{10} , which in the present structure has its lower end provided with concavities to slip over knobs or enlargements on the bottle-neck, such end being held clamped by the band or collar 7. In this case a centrally-apertured rubber or cork washer having a shank fitting down into the neck of the cup is provided, which also has its upper face made to conform with the contour of the drum or globe b^{10} .

Figs. 10 and 11 illustrate another form of my device and means for securing it to the bottle. In this case a globe a^5 is provided with a ground surface, the neck of the bottle being in this instance shaped to fit close against the base of the globe, the globe having pintles, as shown, which fit seats or recesses in the arms m of a spring-frame M , which has a central curved portion m' , which forms a guide for the push member of the globe, and pendent foot members m^3 , which extend down over the outer edges of the neck-flange of the bottle, the horizontal members m^2 extending through the spiral groove n of a collar N , which is held by clips i^{10} , bent out from a collar or band i^{20} , fitted on the bottle under the neck-flange, as shown.

From the foregoing description, taken in connection with the accompanying drawings, the advantages and operation of my improvement, it is thought, will be readily apparent.

A neat and easily-manipulated evacuating means is provided by my invention, which, owing to its simplicity of construction, can be manufactured at a very small cost, and as the parts are arranged to be readily assembled and few in number the same cannot readily get out of order.

The device can be easily manipulated with one hand, and the user pour out as much of the contents as he may find necessary.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a device for the purposes stated the combination with the receptacle having a single feed and discharge opening, a holder secured to the bottle, having spring-supporting

arms and a rotary drum detachably hung on such arms with its periphery in close contact with the discharge end of the receptacle, said drum having a single discharge-opening as specified.

2. In a device for the purposes described, the combination with the bottle or other receptacle, a holder having an opening in the top, means for detachably holding such holder to the bottle-neck, and a hollow body having a single opening, said body being detachably and pivotally supported in the said holder, with a portion thereof projected through the open way in the top, whereby it can be readily turned by finger-pressure and having its lower end held in close contact with the discharge-mouth of the bottle substantially as shown and described.

3. In a device for the purposes described, the combination with the bottle or other receptacle having a single discharge-opening, of a hollow holder adapted to be detachably secured to the bottle and having an open way in the top, a supporting device adapted to be inserted up into the holder, said device having spring-supporting arms or bearing members, and a rotary drum having a single opening and adapted to be inserted through the open way of the holder to engage the said bearing-arms, said parts being so arranged that the upper part of the drum will project above the holder and the lower part held in close contact with the discharge end of the bottle as specified.

4. In a device as described the combination with the bottle or other receptacle, of an evacuating drum or globe having a single opening, a spring-metal supporting-frame having an opening or passage and clamp portions for pivotally supporting the drum or globe, a friction-block having a central passage held upon the supporting-frame and means for holding the supporting-frame with the friction-block securely in the discharge-mouth of the bottle substantially as shown and described.

5. The combination in a device as described, with the holder and a bottle detachably secured thereto and having an opening in the upper end, of the band f having spring-arms g , and a slot j , and the drum b having a single opening and adapted to be pivotally held in the said arms g as specified.

6. In a device as described, the combination with the holder a having an opening a' in the top and provided with means whereby it can be secured to the bottle or other receptacle, of the drum b having a stop-groove d in its side and a single opening b' , and the band f having an opening j and spring-arms g one of such arms having a lug adapted to engage the groove d , said drum being pivotally supported in such arms g as specified.

ANDERS AKESON.

Witnesses:

WALTER C. GARDNER,
WALTER V. LAWTON.