W. H. McNUTT.

DISPENSING CAN.

APPLICATION FILED DEC. 1, 1914.

1,189,463. Patented July 4, 1916.

Fig. 1

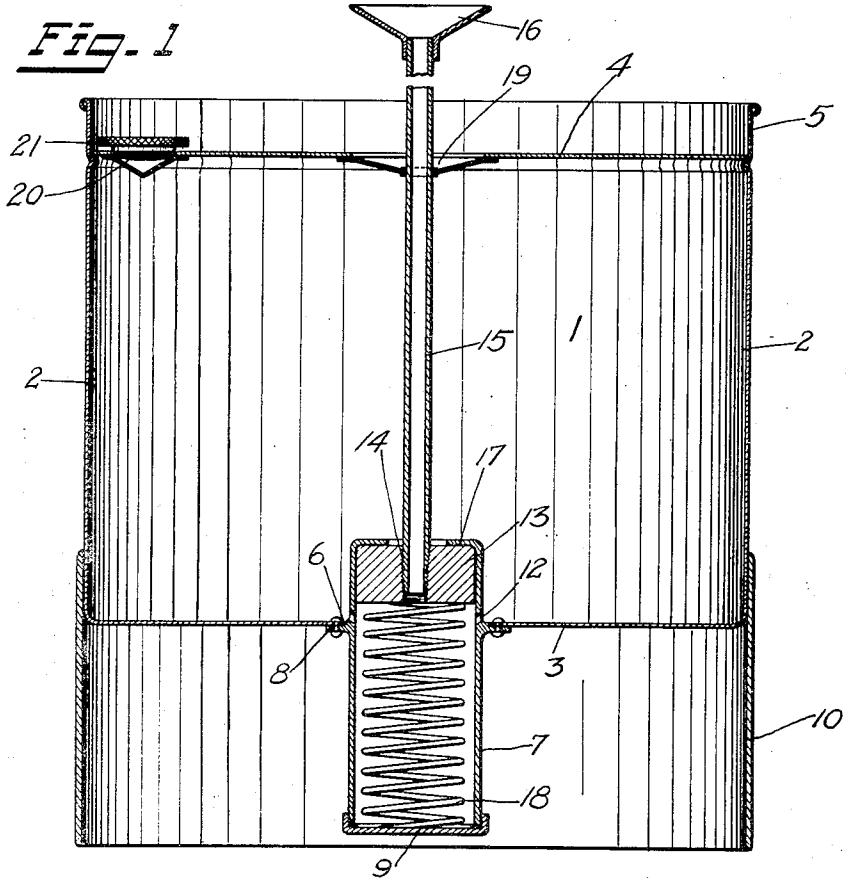
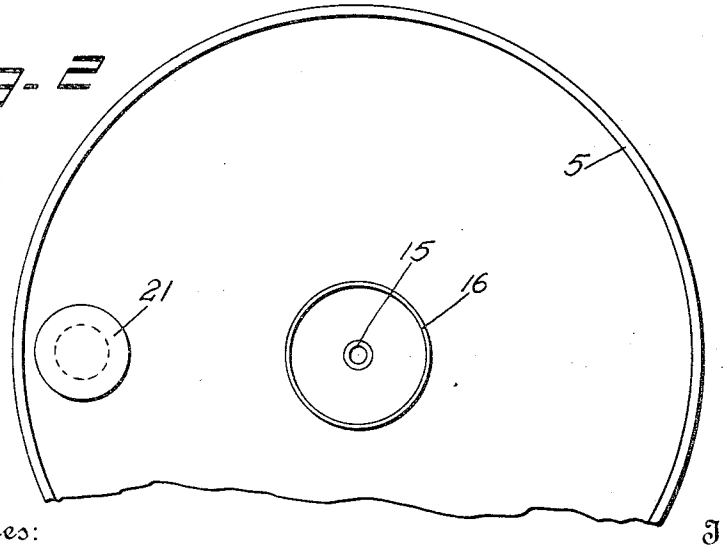


Fig. 2



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UNITED STATES PATENT OFFICE.

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DISPENSING-CAN.

1,189,463. Specification of Letters Patent. Patented July 4, 1916.

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To all whom it may concern:

Be it known that I, WILLIAM H. McNUTT, a citizen of the United States, and resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Dispensing-Cans, of which the following is a specification.

This invention has for its object to provide an improved form of a dispensing can, in which by the mere act of applying a sponge or cloth at the upper extremity of a tubular member under slight pressure sufficient to depress this member, the desired fluid in the container will be forced up through the tube and saturate the sponge or cloth; while any excess of the fluid will be received in the upper part of the container and pass down into the same through minute flame-proof openings in the top of the container, so that there is none of the inflammable fluid exposed to ignite or explode; and in which device as soon as the sponge or cloth is removed from the tube, its contents remaining therein will flow back into the container.

In the accompanying drawing illustrating one embodiment of my invention Figure 1 is a vertical section through the device; and Fig. 2 shows the same in plan.

As shown in the drawing, the device comprises a suitable container 1, preferably of cylindrical form, comprising side walls 2, a bottom member 3, and a top 4 that is arranged a short distance below the projecting upper edge 5 of the side walls, thereby providing a kind of receptacle at the upper portion of the container.

The bottom of the container has a central opening 6 in which is mounted a pump barrel 7 by its intermediate annular flange 8 that is secured to the margin of the opening 6, whereby the barrel projects a short distance up into the container; and the barrel also projects some distance down below the bottom member 3, where its lower end is closed by a screw cap 9 as shown. To properly support the container, and to protect the pump barrel I provide a kind of rim or cylinder 10 projecting down from the container a short distance beyond the lower end of the barrel member.

The barrel 7 is provided with one or more openings 12 just above its flange connection 8 with the bottom of the container, whereby communication is established between the lower portion of the container and the pump barrel; so that the fluid poured into the container will flow down and fill the barrel.

In the pump barrel slides a piston 13 having an axial bore 14, and a tube 15 is secured in this bore and extends upward through the container, and through a suitable opening in the top 4 of the container. It will be understood that if the pump piston is brought to the upper portion of the barrel as shown in Fig. 1, the fluid will flow down through the openings 12 and fill the barrel, and also the tube 15 up to the same level. Upon pressure being applied on the end of the tube projecting above the top 4, the piston will be forced down in the barrel and will shortly cover the several openings 12 preventing escape of the fluid in the barrel through such openings; and the fluid can now only find escape up through the tube 15, and must be forced up through the same by the downward movement of the piston, and hence the fluid will flow out of the upper end of the tube.

At the top of the tube 15 I preferably apply a cone shaped member 16, that will receive the cloth or sponge that is to be moistened by the fluid, and which will receive any surplus fluid and convey it back to the tube. For the purpose of returning the piston 13 to its normal upper position in the barrel as shown, I provide a coil spring 18 in the barrel beneath the piston, and the upper portion of the barrel has a flange 17 extending inwardly to limit the upward movement of the piston, that is thus retained above the inlet openings 12.

As stated the side portions 5 project up beyond the top 4 to provide a receptacle for any fluid that may overflow the cone 16, or may drop from the sponge or cloth; and to permit such fluid to pass back into the container I provide an opening containing a screen having minute flame-proof apertures. As shown a screen 19 closes a large central opening in the top 4, and the tube 15 passes through a central aperture in this screen; that is preferably somewhat conical. The top is also provided with a threaded opening at 20 to receive a threaded plug 21, also containing flame-proof openings.

In the use of the device the container is filled through the opening closed by the plug, and the minute openings in the upper member will permit escape of the vapor slowly if it accumulates under pressure, but usually the vapor does not escape, as it would if there were large openings in the top member.

The sponge or cloth to be moistened with the fluid in the container is simply placed on the cone 16 and the same pressed downward, that will at once cause the fluid to rise through the tube and saturate the article. Upon removal of the article the plunger and tube will rise again, and the contents will flow back into the barrel. Any fluid that may overflow the cone 16, or drop from the sponge or cloth, will be received by the top member 4, and will pass down through the screen 19 into the container and thereby saved for future use. Thus there is no exposed liquid to generate a dangerous vapor and cause explosion; and all of the fluid that is not received by the sponge or cloth will return to the container.

This device is of great utility in tailor shops, and in various manufacturing places where a sponge or cloth is to be saturated with inflammable fluids such as benzin, gasolene, liquid rubber cement or other liquids of this nature. There is no possibility of fire reaching the inflammable liquid, avoiding risks of explosion.

Having thus described my invention, what I claim is:—

1. The combination of a closed container having an aperture at the top, a pump barrel at the bottom of the container with openings communicating therewith to receive fluid from the bottom of the container, an apertured piston working in the container, a tube secured in the piston aperture extending upwardly through the container and projecting through the top, whereby the depression of the tube and piston will first close said openings in the barrel, and thereupon force the fluid from the barrel up through the tube, a spring in the barrel below the piston to normally retain it above said openings, and side walls projecting upwardly at the top to form a receptacle to receive overflow from the tube.

2. The combination of a closed container having an opening at the top closed by a screen of flame-proof material, a pump barrel at the bottom of the container and communicating therewith by openings to receive fluid from the bottom of the container, a piston working in the container and having an aperture extending therethrough, a tube secured in the piston aperture and extending upwardly through the container and through the opening in the screen, whereby the depression of the tube and piston will first close communication between the barrel and container and thereupon force the fluid from the barrel up through the tube, a spring in the barrel below the piston to normally retain it above the openings in the barrel, a cone at the top of said tube, and side walls projecting upwardly at the top to form a receptacle to receive overflow from the cone.

3. The combination of a closed container having an opening at the top closed by a screen of flame-proof material, a pump barrel at the bottom of the container and communicating therewith by openings to receive fluid from the bottom of the container, a piston working in the container and having an aperture extending therethrough, a tube secured in the piston aperture and extending upwardly through the container and through the opening in the screen, whereby the depression of the tube and piston will first close communication between the barrel and container and thereupon force the fluid from the barrel up through the tube, a spring in the barrel below the piston to normally retain it above the openings in the barrel, a cone at the top of said tube, side walls projecting upwardly at the top to form a receptacle to receive overflow from the cone, and a supporting member extending down from the side member to form a base below the lower end of the barrel.

4. The combination with a container having a base extending below the bottom wall, of a pump barrel secured at a central opening in the bottom to extend above and below the bottom, with apertures just above the bottom to receive fluid from the container, and an opening in the top of the barrel, an apertured piston working in the barrel, a spring in the barrel below the piston to normally retain it above said openings, and a tube secured in the piston aperture extending upwardly through the container and projecting through an opening in the top, whereby the depression of the tube and piston will first close said openings in the barrel, and thereupon force the fluid from the barrel up through the tube.

5. The combination with a container having a base extending below the bottom wall, of a pump barrel secured at a central opening in the bottom to extend above and below the bottom, with apertures just above the bottom to receive fluid from the container and an opening in the top of the barrel, an apertured piston working in the barrel, a spring in the barrel below the piston to normally retain it above said openings, a tube secured in the piston aperture extending upwardly through the container and projecting through an opening in the top, whereby the depression of the tube and piston will first close said openings in the barrel, and thereupon force the fluid from the barrel up through the

tube, and side walls projecting upwardly at the top to form a receptacle to receive overflow from the tube.

6. The combination with a container having a base extending below the bottom wall, of a pump barrel secured at a central opening in the bottom to extend above and below the bottom, with apertures just above the bottom to receive fluid from the container and an opening in the top of the barrel, an apertured piston working in the barrel, a spring in the barrel below the piston to normally retain it above said openings, a tube secured in the piston aperture extending upwardly through the container and projecting through an opening in the top, whereby the depression of the tube and piston will first close said openings in the barrel, and thereupon force the fluid from the barrel up through the tube, the container having the opening at the top around the tube closed by a screen of flame-proof material, and side walls projecting upwardly at the top to form a receptacle to receive the overflow from the tube.

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Witnesses:
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