

March 21, 1944.

S. L. GOOKIN

2,344,507

CONTAINER

Filed Dec. 14, 1942

Fig.1

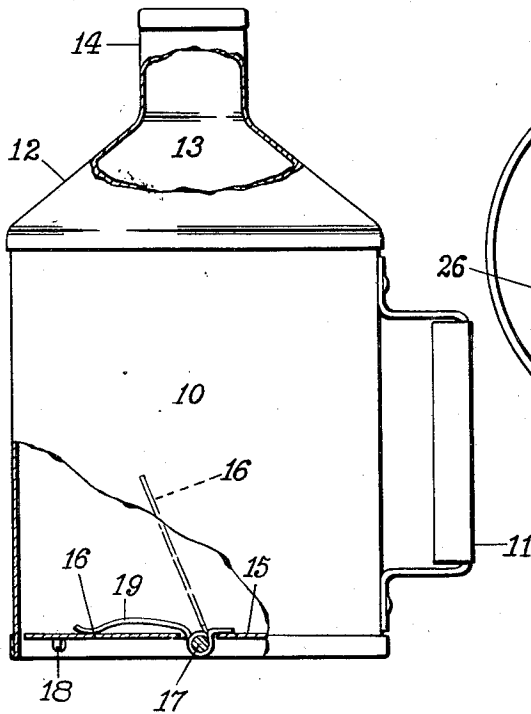


Fig.4

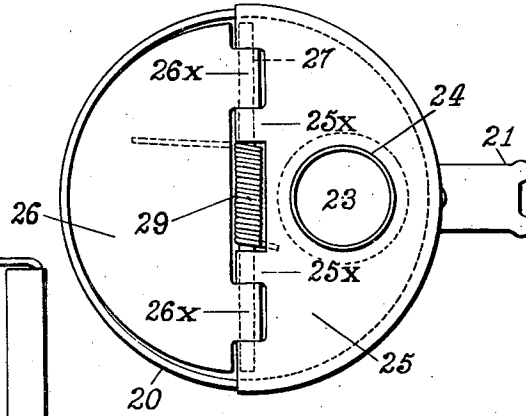


Fig.2

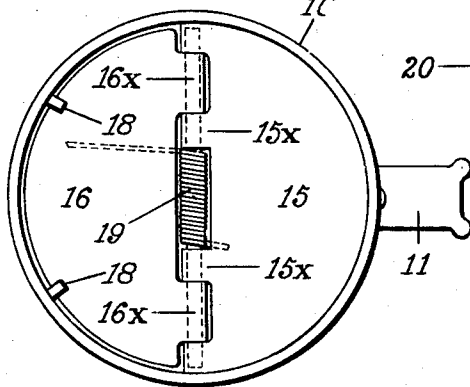
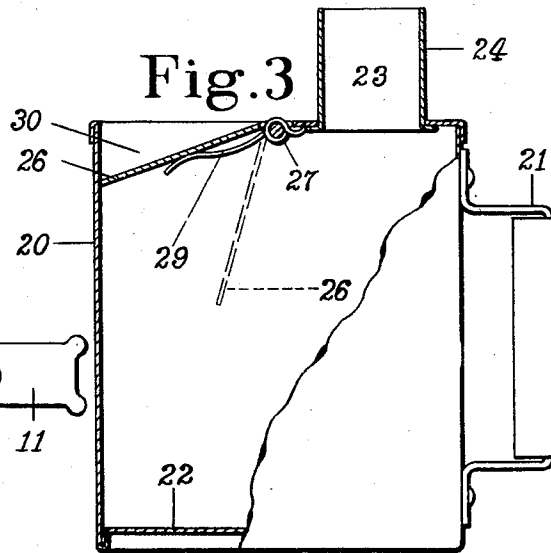


Fig.3



INVENTOR
Sylvester L. Gookin
By his attorney
Thomas J. Ryan.

UNITED STATES PATENT OFFICE

2,344,507

CONTAINER

Sylvester L. Gookin, Quincy, Mass., assignor to
United Shoe Machinery Corporation, Flem-
ington, N. J., a corporation of New Jersey

Application December 14, 1942, Serial No. 468,898

3 Claims. (Cl. 221-11)

The purpose of the present invention is to provide an improved container for scooping, carrying and pouring small articles such as eyelets, rivets and washers with a view to saving material and time in factories where such articles are used in large quantities.

In shoe factories, for example, it is necessary to replenish the hoppers of high-speed eyeleting machines two or three times per hour. It is not feasible to increase the size of the hoppers because too large a mass of eyelets would impede their emission from a hopper through the restricted port leading to a raceway. Under present conditions eyeleting operators are obliged to carry eyelets from storage bins or packing boxes and to use whatever small utensil may be at hand, often with the result that a considerable number of eyelets are spilled outside the hoppers instead of being poured into them.

To avoid wasting eyelets and to minimize interruptions due to replenishing hoppers, the present invention provides an improved container comprising a combination of features that enable it to be used first as a scoop, thereafter as a portable and temporary storage medium for a plurality of hopper replenishments, and finally as a dispensing device of the pouring type.

The essential consideration with respect to pouring the contents of the container into a hopper is that the discharge opening or spout shall be restricted to a size that will avoid spilling the contents outside the hopper, but a spout of a size required for this purpose would be too small to be satisfactory for scooping eyelets into the container. Consequently, the container is provided with a relatively large opening through which eyelets may enter, and this opening is so situated as to admit the eyelets into the lower part of the container when the latter is laid on one side and moved endwise to scoop eyelets from a large mass in a storage bin or box. This relatively large opening may be in the end wall from which the pouring spout projects, or in the opposite end wall, but preferably in the latter which constitutes the bottom wall when the container stands upright.

The container is also provided with a hinged flap that constitutes a closure for the relatively large opening. The flap may be arranged to open outwardly or inwardly, but preferably inwardly because that arrangement enables the ingoing eyelets to open it in opposition to a closing spring without any need of a latch or fastener to maintain it in closed position at other times.

Referring to the drawing,

Fig. 1 is an elevation and partial section of a

container embodying the invention in a preferred form in which the inlet opening is in the bottom while the discharge opening is in the top;

Fig. 2 is a bottom plan view of the container shown in Fig. 1;

Fig. 3 is an elevation and partial section of a container embodying another form of the invention in which the inlet opening and the discharge opening are both in the top; and

Fig. 4 is a top plan view of the container shown in Fig. 3.

Considering first the construction shown in Figs. 1 and 2, the container comprises a cylindrical body portion 10 to which a handle 11 is affixed. The top wall 12 is frusto-conical and provided with a small circular opening 13 and a spout 14 through which the contents may be discharged when the container is tipped for pouring.

The bottom wall includes a fixed section 15 and a movable section or flap 16 each semi-circular or nearly so. The margin of the section 15 that bridges the body portion 10 is provided with tabs 15x and the corresponding margin of the flap 16 is provided with tabs 16x. These tabs are rolled to surround a hinge pin 17. The opening bounded in part by a segment (about 180°) of the body portion and in part by the margins forming the hinge has a much greater area than the discharge opening 13 and provides for rapid charging of the container. The flap 16 normally closes this large opening and is arranged to open inwardly, as indicated by broken lines in Fig. 1. When closed, its free margin is sustained in that position by stops 18 and a torsion spring 19 that surrounds the hinge pin.

To scoop eyelets into the container the user will lay it on its side with the handle uppermost and the aforesaid segment lowermost to do the scooping as it is carried into a mass of eyelets in a box or bin. Some of the eyelets will force open the flap 16 and enter the container. Two scooping motions are usually enough to fill the container. While the container is being used to scoop eyelets few if any once in it will run out through the spout 14 because the wall 12 then acts as a retaining wall. The body portion 10 surrounds the sections 15 and 16 and extends far enough below them to guard the hinge and provide a base for standing the container upright on a bench.

The container shown in Figs. 3 and 4 has a large intake opening 30 and a relatively small discharge opening 23 both in the same end. This type enables some eyelets to enter through the discharge opening while a larger quantity enters

through the intake opening. The body portion 20 is cylindrical and a handle 21 is affixed to it. The top wall includes a fixed section 25 and a flap 26 inside the body portion and arranged to open inwardly (see broken lines in Fig. 3). These sections are each semicircular and are provided with cooperative tabs 25x and 26x rolled to form hinge portions and to surround a hinge pin 27. A torsion spring 29 surrounds the pin and normally closes the flap. The semicircular opening 30, bounded in part by a scooping segment of the body portion and in part by the hinge portions, is diametrically opposite the handle 21, with reference to the center or axis of the body portion. Consequently, when the container is used to scoop eyelets from a large mass, all or nearly all those scooped will force open the flap 26 and pass through the opening 30. Nevertheless, some additional eyelets may enter the container through the opening 23 in the spout 24 at the same time, but when the container is tipped to discharge eyelets the flap will deflect them all to the spout which is affixed to the section 25. In this type of container the bottom wall 22 has no opening.

Having described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A scoop comprising a body portion formed to stand on end, two opposite end walls one of which includes a fixed section, a movable section and a hinge connecting them, the fixed section and a segment of the body portion forming an opening through which articles may be scooped from a mass by that segment, and the movable section being arranged to close said opening but to swing inwardly to admit the scooped articles, and a carrying handle affixed to the body portion and located diametrically opposite the scooping segment, and one of said end walls having a restricted opening and a spout for discharging the contents.
2. A scoop as specified in claim 1, of which said openings are located at opposite ends of the body portion.
3. A scoop as specified in claim 1, of which said openings are both located at one end of the body portion.

SYLVESTER L. GOOKIN.