June 28, 1960 N. J. KRUG 2,942,450

BAG FOR USE WITH NIGHT DEPOSITORIES

Filed Jan. 31, 1957

Fig. 1

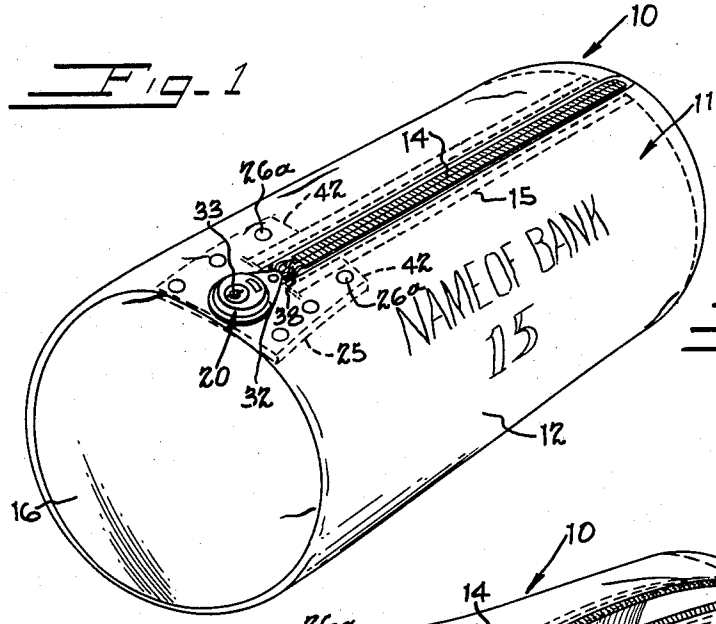
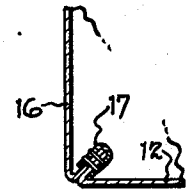


Fig. 4



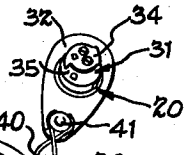


Fig. 2

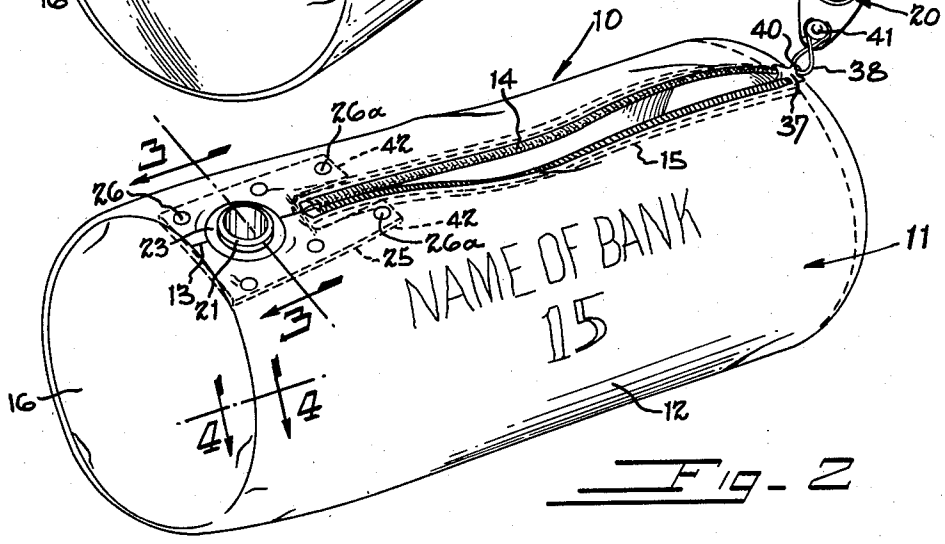
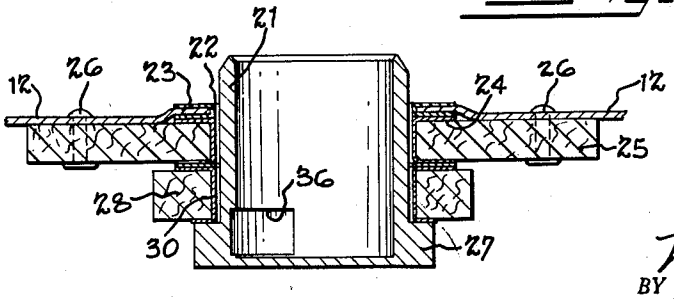


Fig. 3



INVENTOR.
Newton J. Krug.
BY
Wood, Herron & Evans.
ATTORNEYS.

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BAG FOR USE WITH NIGHT DEPOSITORIES

Newton J. Krug, Cincinnati, Ohio, assignor to The Mosler Safe Company, Hamilton, Ohio, a corporation of New York

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1 Claim. (Cl. 70—68)

This invention relates to flexible containers, or bags, and is particularly directed to a canister type bag adapted to be used in conjunction with night depositories.

Many business establishments which close after banking hours, or remain open on weekends and holidays when no banking facilities are open, utilize a night depository for the temporary storage of cash, checks, and the like until the next business day when the valuables are removed from the depository and deposited in a regular checking account.

More particularly, it is customary for the proprietor or one of his employees to place the day's receipts in a bag which is locked and then taken to a bank where it is placed in a night depository from which it drops into a temporary storage vault. At some later time, the proprietor, or person responsible for handling the money, obtains the bag from the temporary storage vault, withdraws the funds from the bag, and deposits them in a conventional manner.

One object of the present invention is to provide a canister type bag of generally cylindrical shape which is adapted to be handled in a night depository without becoming wedged, or otherwise jamming the operating mechanism. This feature of the present bag is of great importance since in recent years, night depositories have been made increasingly complex in order to improve their security and minimize the possibility that a bag can be surreptitiously removed by various "fishing" and "trapping" techniques which have been developed.

By way of example, one such depository is shown in my co-pending application for "Night Depository," Serial No. 642,840, now Patent No. 2,901,165, issued August 25, 1959. This depository includes a pivotally mounted hopper, an inner rotatable member, and an ejector plate which are movable relative to one another and are each adapted to engage the bag after it has been placed in the depository and while it is being shifted from the depository opening to a chute leading to the storage vault. In addition to these elements, the depository includes a plurality of serrated fingers disposed in the path of travel of the deposit bag. The present bag, of generally cylindrical configuration, cannot be stuffed out of shape and has no projecting corners or the like which might, in the normal operation of the depository, tend to wedge between relatively moving parts or to become caught on the serrated fingers or similar elements.

A second object of the present invention is to provide a deposit bag which inhibits tampering by messengers or other unauthorized persons. More particularly, it is a concept of the present invention to provide a bag having a closure which will readily show if the bag has been opened in any manner except by operation of the lock provided.

As explained in detail below, a bag constructed in accordance with the present invention includes a longitudinally extending slide fastener which is adapted to close the access opening in the bag. The slidable operating element of this fastener is provided with a locking

flap having a circular opening for receiving the cylinder, or plug member, of a cylindrical type lock. The cylinder, or sleeve member, of the lock is secured to the wall of the bag at the end of the slide fastener so that when the cylindrical locking piece is inserted in the sleeve, the zipper operator is held in place and cannot be shifted to open the zipper until the lock is released.

In the past, it has been possible to gain limited access to a container having a locked zipper by bunching the zipper material and forcing it beneath the stationary fastener operator. The small opening made in this manner is of sufficient size to permit bills and the like to be fished from the bag. Thereafter, the sides of the fastener material are pulled slightly in the opposite direction leaving no visible trace that the bag has been entered. The present bag is constructed to eliminate the possibility of breaking into the bag in this manner. More particularly, the present invention contemplates the provision of rigid stays or the like mounted in the bag and extending along opposite sides of the slide fastener adjacent to the closed position of the fastener operator. These rigid stays prevent the fastener material from being bunched, or shifted past the stationary operator, so that the operator must be shifted to open the bag.

Another method previously employed to obtain access to a locked zipper bag involved spreading the tangs conventionally provided on the locking flap for joining the flap to the fastener operator. After these tangs were spread, the fastener operator was shifted to open the fastener and provide access to the bag. Later, the tangs were reinserted in the fastener operator and bent together; again no visible trace remained that the bag had been tampered with.

The present invention contemplates the prevention of this latter type of manipulation by utilizing a continuous wire, preferably formed of hard steel, to join the fastener operator and locking flap. This wire is permanently joined to the locking flap and passes through a loop, or tang, formed in the fastener operator; so that the wire must be cut in order to free the fastener operator. Since a cut wire can readily be spotted, it is easy to determine if a bag has been tampered with in this manner.

These and other objects of the present invention will be more readily apparent from a consideration of the following detailed description of the drawings illustrating a preferred embodiment of the invention.

In the drawings:

Figure 1 is a perspective view of a deposit bag constructed in accordance with the present invention showing the slide fastener in a locked position;

Figure 2 is a perspective view of a deposit bag with the slide fastener in an open position;

Figure 3 is a cross-sectional view taken along line 3—3 of Figure 2; and

Figure 4 is a cross-sectional view taken along line 4—4 of Figure 2.

As shown in Figures 1 and 2, a bag **10** constructed in accordance with the present invention comprises a body **11** of generally cylindrical configuration; the body is formed of a flexible durable material, such as canvas or the like. In the preferred embodiment the bag body includes a side wall **12** formed of a single length of material. The abutting ends of the strip are stitched together for a short distance as at **13** and are stitched to the sides of a conventional slide fastener **14** as at **15**.

In addition to side wall **12**, the bag includes two end walls **16** of circular configuration. As best shown in Figure 4, the peripheral portion of each of the two end walls is folded inwardly and is stitched to the adjacent overfolded portion of the side wall and to a circular reinforcing strip **17** formed of a suitable heavy fabric.

The bag also includes a cylinder type lock **20** comprising a cylindrical sleeve member **21** mounted in the bag body adjacent to one end of the slide fastener, and a cylinder, or plug member adapted to be inserted in the cylinder and locked in place. As best shown in Figure 3, sleeve **21** projects outwardly through a circular opening **22** formed in the side wall **12** of the bag. The outer wall of the cylinder tightly engages grommets **23**, **24** respectively fitted in the periphery of the opening in the cloth material and corresponding opening in reinforcing member **25**.

Reinforcing member **25** is preferably formed of a relatively rigid material, such as leather, thick plastic, sheet, or the like and is of generally rectangular configuration. This reinforcing member is secured to the bag body in any suitable manner, such as by means of a plurality of rivets **26**. The inner end of sleeve **21** is formed with an integral collar **27**. The sleeve carries a spacer member **28** preferably formed of leather or the like and fitted with a grommet **30**, grommet **30** being press-fitted over the sleeve into engagement with collar **27**.

Cylinder **31** is either permanently secured in any suitable manner to a locking tab **32**; or alternatively cylinder member **31** is removably inserted within a circular opening in the tab. In either case, when the cylinder is inserted into the sleeve and locked, locking tab **32** is secured in place and cannot be shifted until the cylinder is again withdrawn from the sleeve.

The specific details of lock **20** constitute no part of the present invention and it is not considered necessary to describe this lock in detail here. In general however, when cylinder **31** is inserted within sleeve **21** and a key inserted in keyhole **33** is rotated, a plate **34** eccentrically mounted on the lower end **35** of cylinder **31** is rotated so as to project outwardly beyond the cylinder wall into engagement with a locking groove **36** formed in the side wall of the sleeve. The interengagement of plate **34** and groove **36** prevents the cylinder from being withdrawn from the sleeve until the key is turned in the opposite direction.

Locking tab **32** is joined to slide fastener operator **37** by means of a length of hardened wire **38**. This wire passes through a loop **40** formed in the fastener operator and is permanently joined to the underside of tab **32** as by means of a rivet **41**.

As best shown in Figure 1, rigid reinforcing member **25** extends along each side of the slide fastener a sufficient distance so that a length of rigid material **42** is disposed on each side of the fastener operator **37** when the fastener operator is locked in its closed position. The canvas bag material is joined to rigid arms **42** in this area by means of rivets **26***a*. The function of these rigid extensions is to prevent the fastener from being bunched and pushed through the stationary operator to provide limited access to the bag.

By securing the reinforcing member to the bag adjacent to the lock sleeve, the reinforcing member also functions to maintain the sleeve in an outwardly extending direction whereby the lock plug can readily be inserted in the sleeve.

When the bag is filled, it inherently assumes the canister shape shown in Figures 1 and 2. Consequently, the bag cannot become wedged between moving depository parts and the bag does not have any projecting corners which might become caught on fingers or similar elements in a depository.

From the foregoing disclosure of the general principles of the present invention and the above description of a preferred embodiment, those skilled in the art will readily comprehend the various modifications to which the present invention is susceptible. For example, if desired, the arms of reinforcing member can be eliminated and replaced by rods or similar rigid stays stitched in place along the sides of the slide fastener.

Having described my invention I claim:

A slide fastener for closing a slit opening in a flexible wall, said slide fastener including a fastener operator, locking means for securing said fastener operator at one end of the slide fastener, said locking means comprising a cylindrical type lock having a hollow cylindrical sleeve member extending outwardly through an opening in the flexible wall spaced from one end of the slide fastener, a locking flap joined to the fastener operator and having an opening therethrough, a lock cylinder extending through said opening in the locking flap, said lock cylinder being secured to said flap and being adapted to be received within said sleeve for securing said locking flap in position adjacent to said sleeve, a relatively rigid sheet of material mounted on the inner surface of the flexible wall, said sheet including a first portion surrounding said sleeve, and two spaced arms extending from said first portion along opposite sides of said slide fastener adjacent to the fastener operator in its closed position, and means securing the first portion and arms of said sheet of material to said flexible wall.

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