March 20, 1928. 1,663,103

F. W. THOMPSON

WEIGHT CONTAINER

Filed Sept. 19. 1925

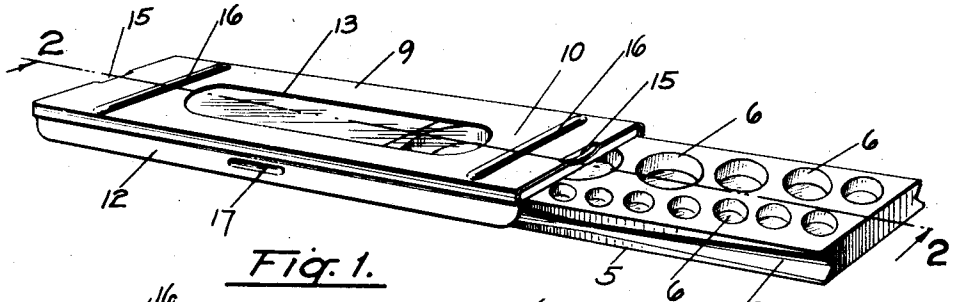

Fig. 1.

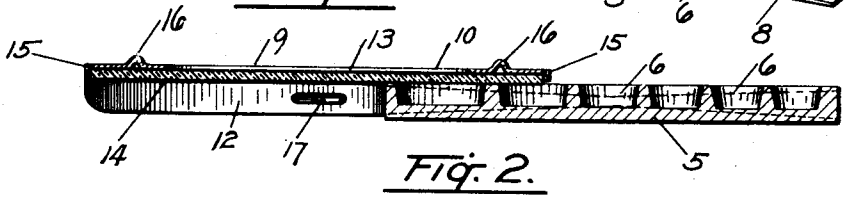

Fig. 2.

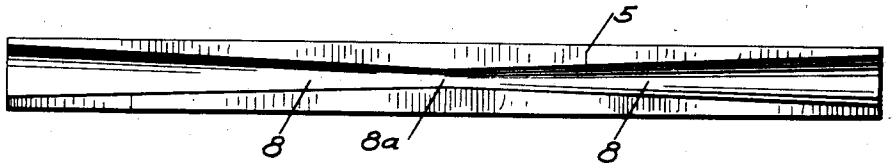

Fig. 3.

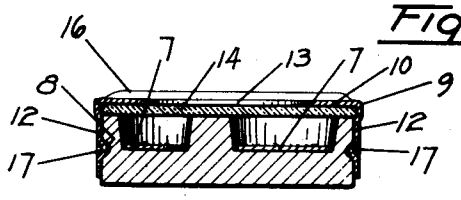

Fig. 4.

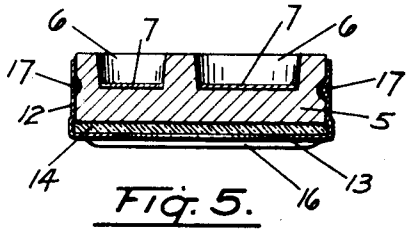

Fig. 5.

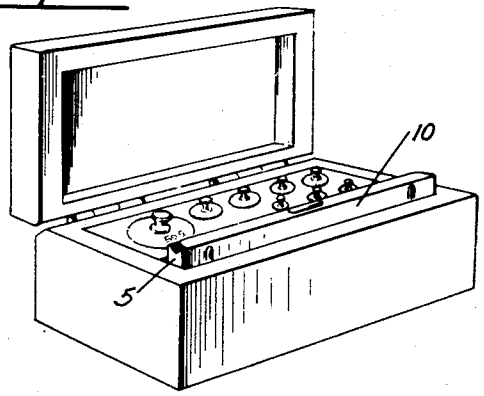

Fig. 6.

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UNITED STATES PATENT OFFICE.

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WEIGHT CONTAINER.

Application filed September 19, 1925. Serial No. 57,373.

This invention relates to holders of the kind in which the fractional parts of a set of weights are kept in connection with weighing instruments.

Heretofore, a piece of glass loosely laid over the compartments of the holder, which contain the fractionals, has been commonly used to serve as a cover. In handling and transporting weight boxes in which the holder is contained the smaller weights which are very thin, like tinfoil, are frequently jarred out of their compartments and damaged under the glass cover and since, when the weights are to be used, the glass cover is merely laid aside, the latter is often lost and is subject to accidental breakage.

It is an object of the present invention to provide a suitable container with a practically non-breakable glass cover together with means for holding it tightly in connection with the container when the weights are not in use.

The container and the cover are moreover so constructed that the cover can be easily removed when the weights are to be used, while under the same conditions the cover may be attached compactly at the bottom of the container to prevent the cover being lost or misplaced and to permit of placing the entire device inside the balance close to the scale pan in order to facilitate handling of the very small weights without loss.

A further object of the invention is to save space and material in the construction of the box which contains the full set of weights since by the use of my invention the holder for the fractional weights can be placed on edge without loss or damage of the weights thereby permitting of making the box narrower than was formerly required where the holders were placed horizontally of the set. In the old construction hereinbefore referred to, it was necessary to place the inner fractional container in a flat or horizontal position in order to keep the loose glass cover in position and prevent the small weights from being spilled in handling or transportation.

An embodiment of my invention has been illustrated in the accompanying drawings in the several views of which like parts are similarly designated and in which

Figure 1 represents a perspective view of my improved weight holder in a partially open condition;

Figure 2, a longitudinal section along the line 2—2, Figure 1;

Figure 3, a side elevation of the body member of the holder drawn to an enlarged scale;

Figure 4, an enlarged transverse section of the holder with its cover member in the position it occupies when the device is not in use;

Figure 5, a similar section of the holder having its cover member in the reversed position to which it may be adjusted when the box is opened to afford access to its contents; and

Figure 6, a perspective view showing the weight holder in an upright position in a box of the kind used in connection with weighing scales, to hold in addition to weights of larger size, a container of the character of that of the present invention, in which the smaller weights are contained.

It has been common practice to provide in connection with a weighing scale, holders for weights of small value, comprising a tray provided with a number of pockets in which the different weights are arranged according to their sizes.

The trays were usually closed when not in use by placing thereon a heavy slab of glass, sometimes provided with a knob or handle for its ready manipulation. This construction made it necessary that the weight box be constantly maintained in a horizontal position to prevent the weights from spilling.

When the tray was removed from its box in order to place it in convenient proximity to the weighing instrument, the utmost care was required to keep the weights in their respective pockets, especially while the holder was moved from one place to another and a further objection to the old construction was that the glass lid was easily broken or misplaced.

All of the above disadvantages of the old method of closing the weight holder are eliminated by the use of my invention which as stated before maintains the weights in place in the compartments of the holder irrespective of the position of the holder or the box in which it is contained.

Referring further to the drawings, my improved weight holder consists of a tray or body member 5 which in common with the

old construction mentioned hereinbefore, is made of an oblong slab of wood or other suitable material having in its upper surface a plurality of shallow circular recesses or pockets 6 of different diameters to contain the weights which in Figures 4 and 5 of the drawings have been shown as at 7.

The tray differs from those formerly used by having in its side edges longitudinal grooves 8 of hour-glass form which provide the means for the connection of the cover member of the device as will hereinafter be more fully explained.

The cover member consists of a frame-part 9 preferably made of thin metal having at right angles to its body-portion 10, longitudinal flanges 12 adapted to slidably embrace the tray or body member 5 of the device as best shown in Figures 1 and 4 of the drawings.

The top portion 10 of the frame has an oblong opening or window 13 through which the contents of the holder may be seen when the cover is in its normal position upon the tray member thereof and the flanges 12 of the frame are at their junctions with the top portion longitudinally beaded for the support of a glass plate 14 by means of which the window in the top is closed. The plate is slightly shorter than the cover and it is held against displacement by indentations 15 at the ends of the cover engaging the ends thereof.

The longitudinal flanges are indented at central points to form inwardly projecting detents 17 adapted to enter the longitudinal grooves 8 in the sides of the tray member.

The medial neck portions 8^a of the grooves between their oppositely tapering sections correspond in width to the detents and the distance between the detents and the lower surface of the glass plate set in the frame of the cover, slightly exceeds the distance between the neck portions of the grooves and the upper surface of the tray so that when the cover is in place, it will be clampingly held in position by the frictional contact of the detents with the slanting upper edges of the grooves.

Transverse beads 16 on the top portion of the cover at opposite ends of its opening, perform the three-fold function of increasing the rigidity of the cover, of providing thumb-ridges which facilitate the removal of the cover from the tray, and of serving as feet for the stable support of the holder when the position of the cover relative to the body-member thereof is reversed as shown in Figure 5.

Having thus described the structural features of my improved weight holder, it will be readily apparent that when the cover is in place on the tray, the clamping engagement of its detents in the grooves of the same will draw the glass plate tightly in contact with the recessed surface of the tray and hold the cover against accidental lengthwise displacement. The holder may thus be handled and placed in any position without danger of the weights spilling from their pockets, and when the weights are in use the cover may be reversed and fastened beneath the holder to function as a support as illustrated in Figure 5.

What I claim and desire to secure by Letters Patent is:

1. A weight holder of the character described, comprising a longitudinally grooved tray-member having a recessed top, and a flanged cover-member having detents fitted to the grooves on the tray member to hold the cover in contact with the recessed top of the same, and adapted to tighten the cover as the detents approach the longitudinal mid-point of the grooves.

2. A weight holder of the character described comprising a tray member having a recessed top and tapering grooves at opposite sides thereof, and a flanged cover-member having detents fitted to the grooves of the tray-member to hold the cover member in contact with the recessed top of the same, and adapted to tighten the cover as the detents approach the longitudinal mid-point of the grooves.

3. A weight holder of the character described comprising a tray member having a recessed top and hour-glass shaped grooves at opposite sides thereof, and a flanged cover-member having detents fitted to the grooves of the tray member to hold the cover member in contact with the recessed top of the same.

4. A weight holder of the character described comprising a tray-member having a recessed top and longitudinally slanting edges at opposite sides thereof, and a flanged cover-member having detents engaging said edges to hold the cover member in contact with the recessed top of the tray member.

5. A weight holder of the character described comprising a tray member having a recessed top, and a removable cover-member held tightly in contact with the recessed top of the tray member in proportion to the degree that it covers the tray, it being held most tightly when completely covering the tray.

6. A weight holder of the character described comprising a tray member having a recessed top and grooves at opposite sides thereof, and a removable cover member having means co-operative with the grooves to be held either in contact with the top of the tray or in a reversed position, beneath the bottom of the same.

7. A weight holder of the character described, comprising a tray member having grooves on the sides thereof; and a flanged, sliding cover member having detents to fit

in the grooves, the distance from the top of the detent to the under surface of the top of the cover being not more than the distance from the upper and lower edge of the groove to the top and bottom of the tray respectively.

8. A weight holder of the character described, comprising a tray member having grooves at the sides thereof, and a sliding cover member having means cooperating with the grooves of the tray, the cover being adapted to slide on either the top or the bottom of the tray member.

In testimony whereof I have affixed my signature.

FRED W. THOMPSON.