No. 859,033. PATENTED JULY 2, 1907.

J. G. AMES.

SLUG AND SLOT.

APPLICATION FILED MAR. 20, 1905.

Fig. 2.

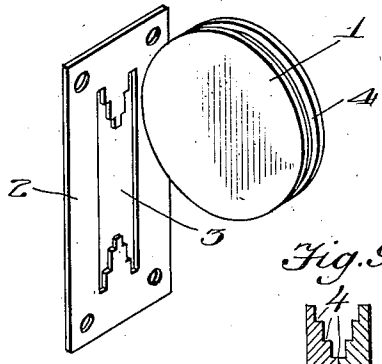


Fig. 1.

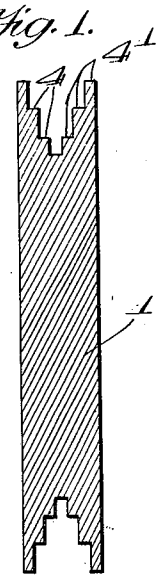


Fig. 10.

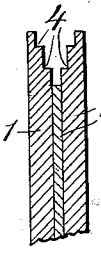


Fig. 9.

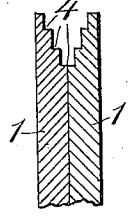


Fig. 3.

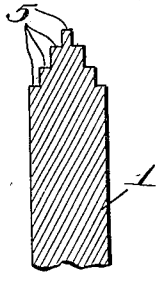


Fig. 5.

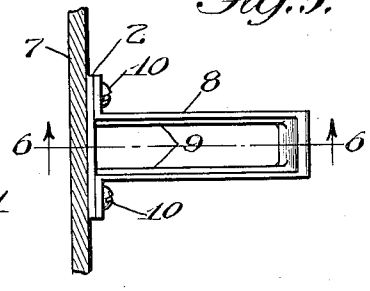


Fig. 4.

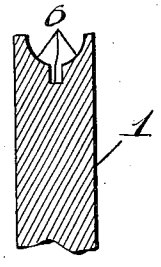


Fig. 7.

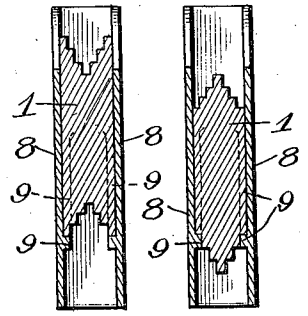
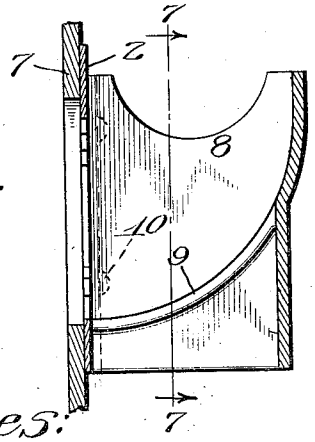


Fig. 6.



Witnesses:

Robert F. Weir

G. B. Weir

Inventor:

John G. Ames.

By Hill & Hill.

Attys.

UNITED STATES PATENT OFFICE.

JOHN G. AMES, OF CHICAGO, ILLINOIS.

SLUG AND SLOT.

No. 859,033. Specification of Letters Patent. Patented July 2, 1907.

Application filed March 20, 1905. Serial No. 251,025.

To all whom it may concern:

Be it known that I, JOHN G. AMES, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Slugs, of which the following is a description.

My invention belongs to that class of devices relating to slugs and the corresponding slots therefor for vending machines and the like, and has for its object the production of a more efficient slot device.

By the use of my slotted plate it is impossible to operate the vending machine except with a slug for which that slot is designed thus preventing fraud. An extension or guide is preferably used in combination with my slug and slot, to facilitate placing the slug in the slot, and to protect the slot.

To this end my invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts; Figure 1 is a diametrical section of a slug. Fig. 2 is a perspective view of a slug and slotted member. Fig. 3 is a partial sectional view showing a modification of the slug. Fig. 4 is a partial sectional view showing another modification of a slug. Fig. 5 is a plan view of the receiving extension. Fig. 6 is a sectional view of the receiving extension taken on line 6—6 of Fig. 5. Fig. 7 is a sectional view of the extension taken on line 7—7 of Fig. 6, showing a slug similar to the one in Fig. 1. Fig. 8 is a sectional view of the extension taken on line 7—7 of Fig. 6, showing a slug similar to the one shown in Fig. 3. Fig. 9 is a sectional view showing the slug made in separate pieces. Fig. 10 shows a slightly modified form of construction.

As shown in the drawings, 1 is a slug to be used in combination with a slotted member 2. The slug is made of any suitable material, and can obviously be made in any preferred manner, either from one piece of stock or from two or more which are then fastened together in any preferred way. Figs. 1, 3 and 4, show the slug made of one piece of stock, while Figs. 9 and 10 show it made of several parts and thus being secured together in any suitable or preferred way. It is obvious that the slug may be made as the ordinary slug and then turned or otherwise made into designs similar to those shown in Figs. 1, 3 and 4, or the same result may be obtained by making the slug of a plurality of thin sections and the sections then secured together. The result in either case is the same, viz a slug composed of sections having different diameters, whereby when a slot is formed corresponding in contour to a diametrical section of the slug, a slug of any other design will not pass through the said slot.

Fig. 1 shows a slug with inside shoulders, 4 4′, Fig. 3 with outside shoulders 5, while Fig. 4 shows a combination of a rounded shoulder and a square groove. A great many variations may be made by different combinations of shoulders. Various modifications and changes in these diameters and other dimensions give a great number of forms of slugs. In the preferred form the slug is made up of substantially two duplicate sections in a reverse position making the slugs symmetrical as is shown in the drawings. When made symmetrical the slug can pass through the slot either way around otherwise there would be one way that the slug would not pass through when presented to the slot.

The slotted member is made of any suitable metal and of a size and style suitable for its use. The contour of the slot 3 corresponds to a diametrical section of the slug, the size of the slot being such as will readily permit the passage of the slug therethrough. It may be attached to the vending qox or conducting tube in any suitable manner, preferably screws are used.

To more readily and conveniently place the slug in the slot and also to protect the slot, an extension 8 may be used. As is shown in Fig. 6, 8 is the extension, 2 the slotted member, and 7 a portion of the receiving box or vending machine. In the preferred form of extension supporting shoulders or shelves 9 are formed on the extensions. A slug when placed in the extension slides or rolls down, shoulders 9 through the slot and into the vending machine or other receptacle provided to receive it. To remove a slug or coin not adapted to the slot an opening is provided for the slug to pass through if thin enough, or by any other suitable opening, also by regulating the height of the side walls of the extension so that a coin or slug may be picked out. Where the side walls are so arranged the opening in the bottom may be omitted.

The position of the extension in regard to the slotted member, depends upon the kind of slug to be used, the extension being adjusted and suitable means may be provided to fasten the extension to the slotted member. The preferred way is to use screws 10, and vary the position of the holes in the extension to get proper adjustment.

In the claims where I specify "formed substantially of sections of different diameters," I wish to be understood as meaning a slug substantially as shown, whether it be made up of a plurality of separate sheets or made integral.

Having thus described my improvement it is obvious that various immaterial modifications may be made in my device without departing from the spirit of my

invention, hence I do not wish to be understood as limiting myself to the exact form or construction shown.

What I claim as new, and desire to secure by Letters Patent is.

1. A slug comprising a circular disk made up of substantially two duplicate sections in reverse position, each section formed substantially of a plurality of sections of different diameters.

2. An article of the kind described comprising a circular disk made up of substantially duplicate parts substantially united by a regularly formed section, each part composed of a plurality of regularly formed sections of different cross sectional areas.

In testimony whereof, I have hereunto signed my name in the presence of two (2) subscribing witnesses.

JOHN G. AMES.

Witnesses:
ROY W. HIEL,
CHARLES I. COBB.