No. 783,477. PATENTED FEB. 28, 1905.

J. B. STRAUSS.

HOLDING RACK FOR CHECKS.

APPLICATION FILED JUNE 15, 1903.

Fig. 1.

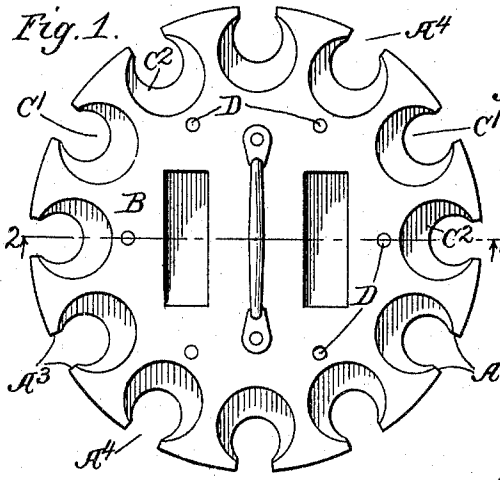


Fig. 2.

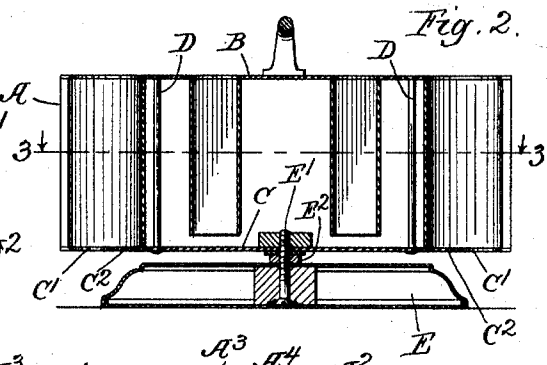


Fig. 3.

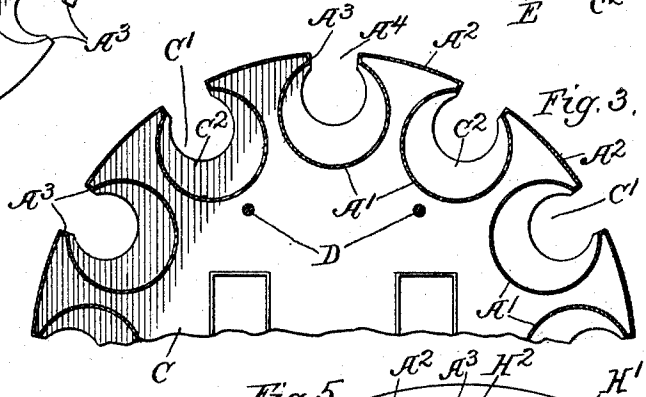


Fig. 4.

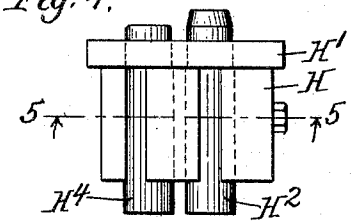


Fig. 5.

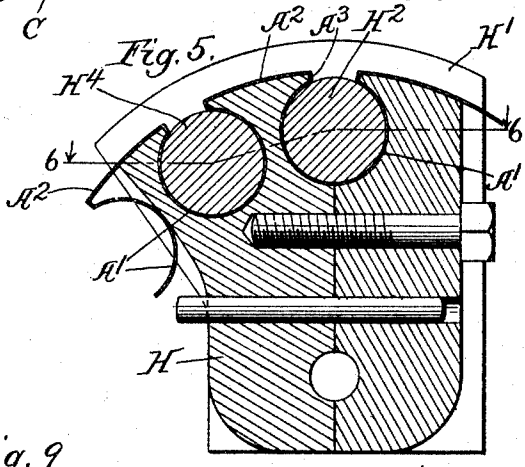


Fig. 6

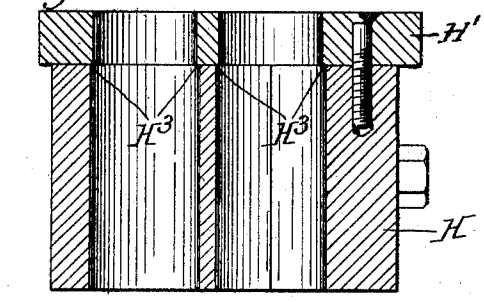


Fig. 7.

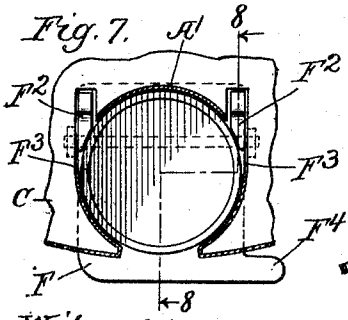


Fig. 9.

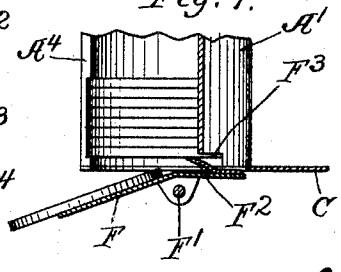
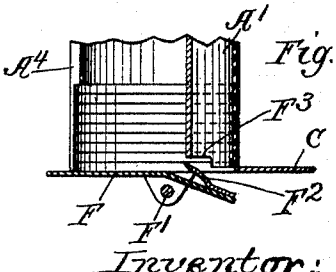


Fig. 8



Witnesses.

Edward T. Fray.

Howard L. Kroft

Inventor:

Joseph B. Strauss

by Parker & Carter

Attorneys.

No. 783,477. Patented February 28, 1905.

UNITED STATES PATENT OFFICE.

JOSEPH B. STRAUSS, OF CHICAGO, ILLINOIS.

HOLDING-RACK FOR CHECKS.

SPECIFICATION forming part of Letters Patent No. 783,477, dated February 28, 1905.

Application filed June 15, 1903. Serial No. 161,477.

To all whom it may concern:

Be it known that I, JOSEPH B. STRAUSS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Holding-Racks for Checks, &c., of which the following is a specification.

My invention relates to holding devices or racks for checks, counters, coins, or the like, and has for its object to provide a new and improved rack of this description.

My invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a plan view of one form of device embodying my invention. Fig. 2 is a section on line 2 2, Fig. 1. Fig. 3 is an enlarged part section on line 3 3, Fig. 2. Fig. 4 is a view of a simple construction for making some of the parts of the rack. Fig. 5 is an enlarged section on line 5 5, Fig. 4. Fig. 6 is a section on line 6 6, Fig. 5. Fig. 7 is a view in part section, showing the application of a removing device for removing coins and the like from the rack. Fig. 8 is a section on line 8 8, Fig. 7. Fig. 9 is a view similar to Fig. 8, showing the parts in a discharged position.

Like letters refer to like parts thoughout the several figures.

Referring now to Figs. 1, 2, and 3, I have shown a circular rack or holder, comprising the side or holding piece A and the top and bottom pieces or plates B and C, all made of thin sheet material and properly connected together. The side or holding piece A is formed, preferably, from a single piece of thin material, such as sheet metal or the like. This material is formed into a series of holding-loops A′ of the proper size to receive the checks, counters, coins, chips, or the like, for which the rack is adapted. These loops are connected by connecting-pieces A^2, which may be curved or straight, integral therewith, and the connecting-pieces A^2 and loops A′ are preferably united by the flattened portions A^3. The side or holding piece is thus provided with a series of slots A^4, extending from the top to the bottom and connecting with the spaces inside of the loops A′, the width of said slots being less than the inner diameter of the loops A′. The entire side or holding piece A is preferably made of a single piece of sheet material; but it of course evident that it might be made of several pieces connected together. In any event a series or plurality of loops and connecting-pieces A^2 will be integral and made from a single piece. The top piece B is made of a thin sheet of metal or other material and is formed with openings corresponding to the size of the openings in the loops A′. The bottom plate C is similar to the top plate, except that the openings C′ therein are smaller than the openings formed by the loops, so that a shelf C^2 is formed, upon which the checks, coins, or other devices rest and by which they are prevented from falling out. Plates B and C may be soldered to the side or holding piece A, and the parts may be further held together by the rods or bolts D, passing therethrough. The device is then preferably rotably mounted upon a support E. This may be accomplished in any desired manner, as by means of the bolt E′. The rack is preferably separated from the base by the washer E^2, so as to permit the free and easy rotation thereof. When the device is formed, as shown in Figs. 1 and 2, the checks, coins, and other devices are removed by inserting the finger in the space C′ and lifting the entire number and then sliding them off at the top. During this process the finger passes up through the slot A^4. If the device is used as a coin-holder, I may provide it with means for removing the coins from the bottom. Any suitable construction for this purpose may be used. In this event the bottom plate C is arranged with the shelf C^2, so that the coins are free to pass out at the bottom, and there is provided a holding-plate F, pivotally mounted at F′ and provided with the separating-fingers F^2. The material is cut away at F^3, so as to permit these fingers to enter the loops and separate the lower coin from the remaining coins. The plate F is preferably provided with a thumb-piece F^4, by means of which it is manipulated. When the plate F is pulled down, the fingers F^2 pass through the openings F^3 and enter between the bottom coin and the coin just above and separate the bottom coin, holding the other coins in position. The bottom coin then falls out, as shown in Fig. 9, and is caught in the hand.

It is of course evident that any other mechanism for this purpose may be used.

The side or holding piece A and the loops A′ may be formed in any desired manner. I have illustrated in Figs. 4, 5, and 6 a simple method of forming this holding-piece, which consists of a die H, provided with holes of proper shape and size to correspond with the loops it is desired to form. The thin sheet of metal is then bent into a loop and slotted into one of these holes until it rests against the end piece H′. The holes in the die have a diameter equal to the outside diameter of the loops A′. The end plate H′ is perforated with holes having a diameter equal to the inside of the loop A′. In other words, these latter holes are smaller by the thickness of the metal than the holes in the die. When the metal is placed in the hole in the die, the form H^2 is forced in, thus accurately shaping the loop A′. The end of the loop strikes against the shoulder H^3 on the end piece H′, and is thus held in position while the form is forced in. The form is then removed and the loop A′ taken out and placed in the next opening in the die, and there is then inserted in said opening a holder H^4, which holds the metal in position. The sheet is then bent into another loop, which is formed by the form in the manner before described. The die is preferably made separable, as shown.

I have shown the holding-spaces in the rack as of substantially the same size; but it is of course evident that any one rack may be provided with holding-spaces of varying size to correspond with the checks, coins, or other devices for which it is designed to hold. It will further be seen that by this construction I am enabled to form a light, strong, durable, neat, and convenient rack or holder made of metal, so that it will take a fine finish. I am enabled to do this by reason of the fact that the plurality of the loops A′ are made integral with each other and with the connecting-pieces A^2, for this construction permits the assembling of the parts in their proper relation without difficulty.

I have described in detail a particular construction embodying my invention, but it is of course evident that the parts may be varied in form, construction, and arrangement without departing from the spirit of my invention. I therefore do not limit myself to the particular construction shown.

When the checks or other devices are to be placed in the rack shown, for example, in Figs. 1 and 2, they are placed in at the top and rest upon the bottom piece C^2, which rests upon the top of the others until the loop is filled. The side opening of the loop is less in diameter than the loop itself, so that these devices cannot fall out. When it is desired to remove them, the finger, for example, is placed in the opening in the bottom piece C^2, so as to engage the bottom device and all the devices are then lifted upwardly until the top one is removed. Each of the devices can thus be successively removed from the rack. The width of the side opening or slot is sufficient to permit the finger to pass up along it. The rack may also be provided with boxes (shown in plan in Fig. 1 and in section in Fig. 2) for holding any desired material, such as cards or the like.

I claim—

1. A holding-rack for counters, &c., comprising a thin sheet of material formed into a series of holding-loops separated by spaces and connected by integral connecting-pieces which project partially across the loops, said loops spaced about a center so as to form a hollow inclosure, and a top and bottom plate connected thereto provided with broken or non-continuous edges, the top plate provided with openings corresponding to the opening in the loops.

2. A holding-rack comprising a side or holding piece of sheet metal formed into a plurality of holding-loops provided with side openings having a width less than the inside diameter of the loop and formed into a hollow case with the loops projecting inwardly, the edges of the loops overhanging so as to engage the device therein and prevent its lateral removal, a top and bottom sheet connected thereto, the top sheet provided with openings through which the devices to be held are inserted into the holding-loops, and means at the bottom for preventing said devices from falling out.

3. A holding device for counters, &c., comprising a holding-piece of sheet metal formed into a series of holding-loops separated by hollow spaces and having contracted side openings, the edges of the loops overhanging so as to engage the devices therein and prevent their lateral removal, a connecting-piece between said loops integral therewith, said connecting-piece acting to partially close the loops and separated by slots which communicate with the interior of the loops, a top and bottom plate connected with said loops and provided with openings which communicate with the interior of the loops.

4. A holding-rack for counters, &c., consisting of a hollow central part made of sheet metal formed into a series of inwardly-projecting loops into which the devices are received, connecting-pieces between said loops which act to partially close them, the edges of the loops overhanging the space within the loops so as to act as engaging faces to prevent the lateral removal of the devices therein, a top and bottom piece connected to the central piece and cut away opposite the ends of the loops.

5. A holding-rack for counters, &c., consisting of a hollow central part made of sheet metal formed into a series of inwardly-projecting loops separated by hollow spaces and into which the devices are received, said loops provided with overhanging edges at their

open sides which prevent the lateral escape of the devices held by the loops, a top and bottom piece connected to the central piece and cut away opposite the ends of the loops, and a base to which the bottom piece is rotatably connected.

6. As an article of manufacture, a central part of comparatively thin sheet material bent inwardly at intervals to form holding-loops with contracted side openings, the loops having overhanging edges which prevent the lateral removal of the devices therein, the ends of the sheet brought together so as to form a hollow indented cylinder, a top and bottom piece connected to the central part and provided with non-continuous edges.

7. A holding-rack, comprising a hollow cylindrical part provided with a series of inwardly-projecting loops which project into the hollow thereof, said loops provided at their open side with overhanging edges which prevent the lateral displacement of the devices contained therein, a top and bottom plate connected therewith and having non-continuous edges and a rotatable connection between the bottom plate and a supporting device.

8. A holding-rack comprising a series of loops made of sheet metal and separated by spaces, the loops arranged in a circle and provided at one edge with an open slot, the edges of the loops overhanging the space of the loops, the whole arranged so that each loop has a side opening throughout its length, the overhanging edges preventing lateral removal of the device therein through the side opening.

9. As an article of manufacture, a compound hollow cylinder comprising a hollow part with an outer cylindrical wall of sheet metal provided at intervals with slots, a series of hollow cylindrical parts projecting inwardly from said slots and having a diameter greater than the width of said slots so as to form internal cylinders, a top and bottom connected thereto and having openings opposite said internal cylinders, the openings in the top having substantially the same cross-sectional area as the cylinders, the openings at the bottom being smaller in cross-sectional area than the cylinders.

JOSEPH B. STRAUSS.

Witnesses:
HOMER L. KRAFT,
FANNY B. FAY.