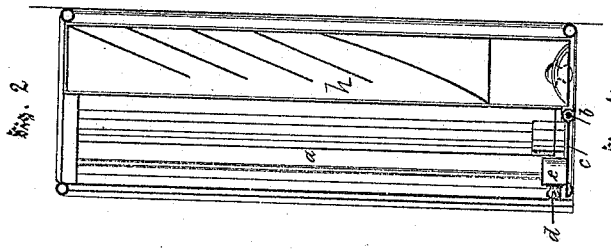
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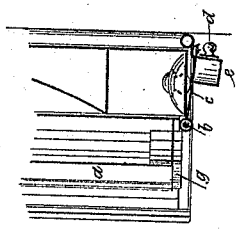
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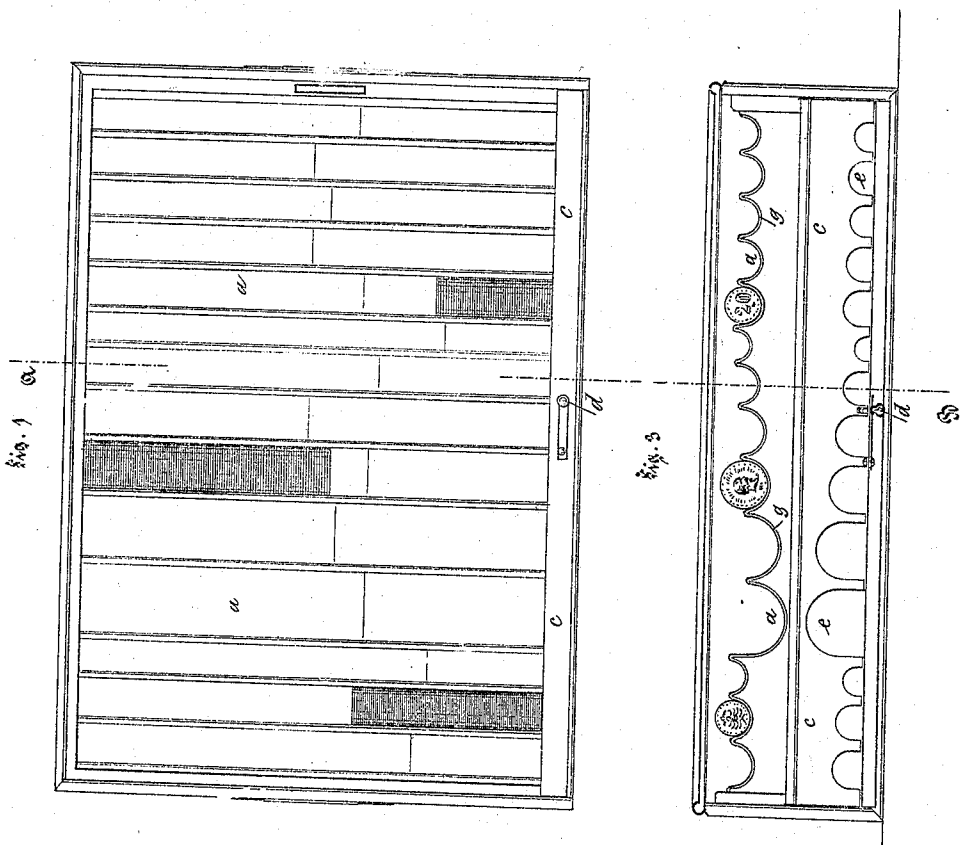
J. HOCK.

COIN COUNTER.

No. 442,892. Patented Dec. 16, 1890.







Witnesses:
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Inventor:
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(No Model.)

2 Sheets—Sheet 2.

J. HOCK.

COIN COUNTER

No. 442,892. Patented Dec. 16, 1890.

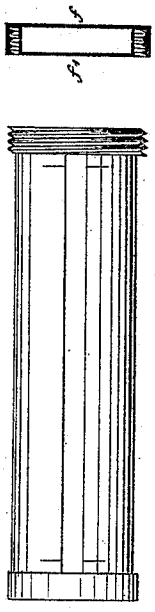


Fig. 6.

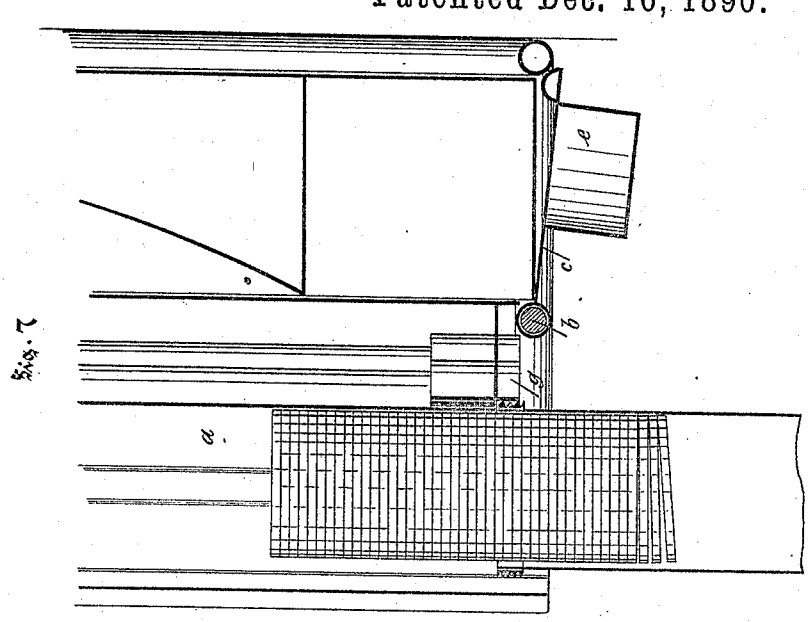


Fig. 7.

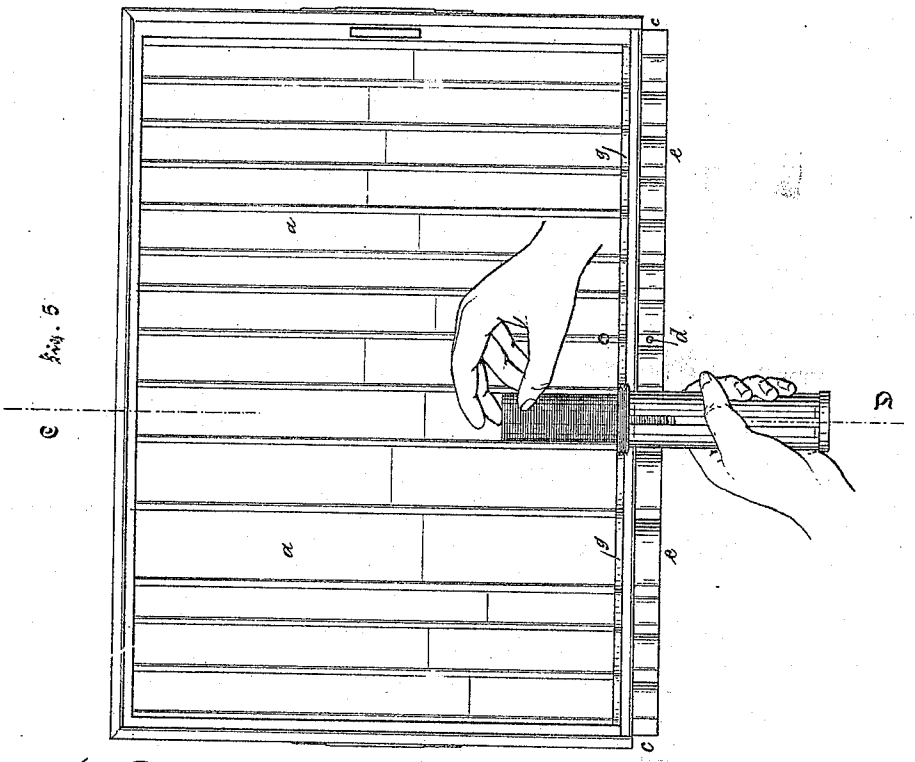


Fig. 5.

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UNITED STATES PATENT OFFICE.

JAKOB HOCK, OF DEGGENDORF, BAVARIA, GERMANY.

COIN-COUNTER.

SPECIFICATION forming part of Letters Patent No. 442,892, dated December 16, 1890.

Application filed May 7, 1890. Serial No. 350,879. (No model.)

To all whom it may concern:

Be it known that I, JAKOB HOCK, a citizen of the German Empire, residing at Deggendorf, in the Kingdom of Bavaria, Germany, have invented certain new and useful Improvements in the Means for Sorting and Counting Coins, of which the following is a specification.

This invention relates to means for sorting and counting coin, and has for its purpose to obviate the waste of time and exertion connected with the methods hitherto in vogue of handling and counting money by hand and packing it in paper tubes or rolls, which is not only a very time-wasting process, particularly in official receiving-offices, banks, or other large monetary establishments, but also fails to admit of a reliable controlling in regard to the actual contents of the paper rolls, which are only distinguished by different color of paper and inscription of contents; also, with cash-boxes having compartments for coins of different value the counting out is very troublesome, as the coins indeed can be sorted therein according to their value, but cannot be counted out rapidly, for it is necessary to arrange the coins in the hand, after taking them out of the cash-box, in order to allow of a commodious counting out. The sorting and counting apparatus forming the object of the invention is intended to obviate the above inconveniences and provide an efficient and simple means for counting out and controlling coins.

Reference being had to the drawings hereunto annexed, in which like letters designate like parts through the various views, Figure 1 is a top view; Fig. 2, a section along line A B, Fig. 1; and Fig. 3, a front view of the improved cash or counting box. Fig. 4 is a detail. Fig. 5 illustrates the method of taking coin out of the apparatus, and Figs. 6 and 7 illustrate details.

The improved cash-box, which may be made of any convenient size or shape to suit the particular requirements, is provided with a suitable number of semi-cylindric molds or receptacles for the coin, which correspond in size to the diameter of the various coins. These molds or grooves *a a* are arranged side by side and may be colored according to the color of the coins—that is to say, made to indicate gold, silver, nickel, and copper. In these molds the coins are placed on edge and form easily-displaceable columns, and they can be commodiously introduced and removed. When thus removed, they are suitably arranged for an easy and rapid counting out, so as to allow large and small amounts to be taken out in one grip and in a well-arranged position. Moreover, the rims of the coins being always visible, a controlling of the latter as regards genuineness and marketable condition is rendered possible. By means of marks mentioned hereinafter the number of coins contained in the single molds can be ascertained at a glance, if not with absolute certainty, at least very approximately.

Besides the facilitated controlling, removal, and counting out of the coins, the improved apparatus affords at the same time the most suitable medium for forming rolls, in the manner hereinafter described. The cash-box is closed at the back and provided in front with a flap or wing *c*, movable on a pin *b*. Said wing is held in the position shown in Figs. 1 and 2 by means of a catch *d*, and when disengaged from the latter can be turned down, as shown in Figs. 3 and 4. It is provided inside with projections *e*, which are rounded according to the cross-section of the molds, and can extend into the ends of the latter in order to prevent the last coin of the filled mold from projecting from the end thereof and falling out on the turning down of the wing.

The columns formed by the coins are always of a certain length precisely calculated according to their kind and value, the bottom of the molds or grooves being provided with lines or marks, by means of which the length of the columns from the flap or wing *c* can be ascertained. In order to form rolls of coins, a corresponding number of coins is shifted firmly against the wing *c*, so as to reach precisely to the linear marks. The number of coins in the molds may, however, also be easily ascertained by actual counting. As a further safeguard, a measure may be employed consisting of two displaceable hooks and serving to measure the length of a column of coins.

The coin roll or tube forming part of the improved apparatus and illustrated by Fig. 6 is made of metal and provided with a longitudinal slot, allowing the coins contained

in the roll to be seen. This tube is closed at one end and furnished at the other end with a cover or cap *f*, adapted to be screwed on and off and having a double bottom. The inner portion of said bottom terminates with the screw-thread on the tube, or it may extend farther into the latter. The length of the tube—that is to say, of the inner space thereof—may with gold and silver coin exactly correspond to the length of the coin-roll, so as to guarantee the tube when filled to contain the exact number of coins, or it may be slightly longer to allow the contents to be counted through the slot by means of the finger or of the measuring-hook above referred to.

To form coin-rolls the wing *e*, after the amount has been measured off in the molds, is opened, the metal tube brought close to the mold, where it is made to bear on a curved notch *g*, provided below each mold, and the coins are shifted into the tube, as shown in Fig. 5 by a top view and in Fig. 7 as a section on an enlarged scale along the line C D.

The coins are filled into the tubes very rapidly, as the inner surfaces of the latter and of the corresponding molds lie in one and the same plane. The tube when filled is closed by screwing on the cap or lid above referred to, and thus forms a means of circulation capable of ready control.

The cash-box, which is provided with a sliding cover adapted to be locked, may also have a receptacle or drawer *h* for paper money, coupons, stamps, and such like, thus meeting all requirements of an ordinary cash-box. The coin-tubes may also be formed as larger accumulating tubes for the head-cashiering office or for conveyance. Thereby all comprehensive cash transactions can be performed in a very short time, particularly as the rolls need not be opened to examine their contents, and their value can be read off and measured. The whole cash in hand—*i. e.*, contents of the cash-box—can be formed into rolls within a few minutes, and is thus arranged in good order.

The improved cash counting and controlling device may also be made with several grooves or molds for the entire cash value of coin and be adapted to be introduced into a large cash box or safe, thus allowing, in medium establishments, the whole of the cash in hand to be kept in such boxes and therefore be easily counted and controlled without filling up any tubes or using any rolls; or, for chief-receiving offices, banks, or other large establishments, boxes may be used, each of which has but one size of grooves for the respective coin, thereby admitting of an easy control and compact deposition of the largest quantity of hard cash, in contradistinction to the clumsy packing thereof in sacks or barrels, as heretofore.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A cash-drawer provided with a series of semi-cylindrical grooves side by side, for receiving coins, in combination with a flap for closing the ends of the several grooves in the cash-box, substantially as set forth.

2. A cash-drawer provided with a series of semi-cylindrical grooves side by side, for receiving coins, in combination with a flap hinged on one end of the cash-box for closing the open ends of the several grooves, said flap being provided with internal semi-cylindrical projections fitting in the open ends of the grooves, substantially as set forth.

3. The combination, with a cash-drawer having a series of semi-cylindrical grooves side by side, of a hinged flap for closing the grooves, and metal tubes, each having a longitudinal slot, one end of each of said tubes being closed and the other provided with a detachable cover or cap, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JAKOB HOCK.

Witnesses:
EUGEN GUGEL,
M. A. GUGEL.