

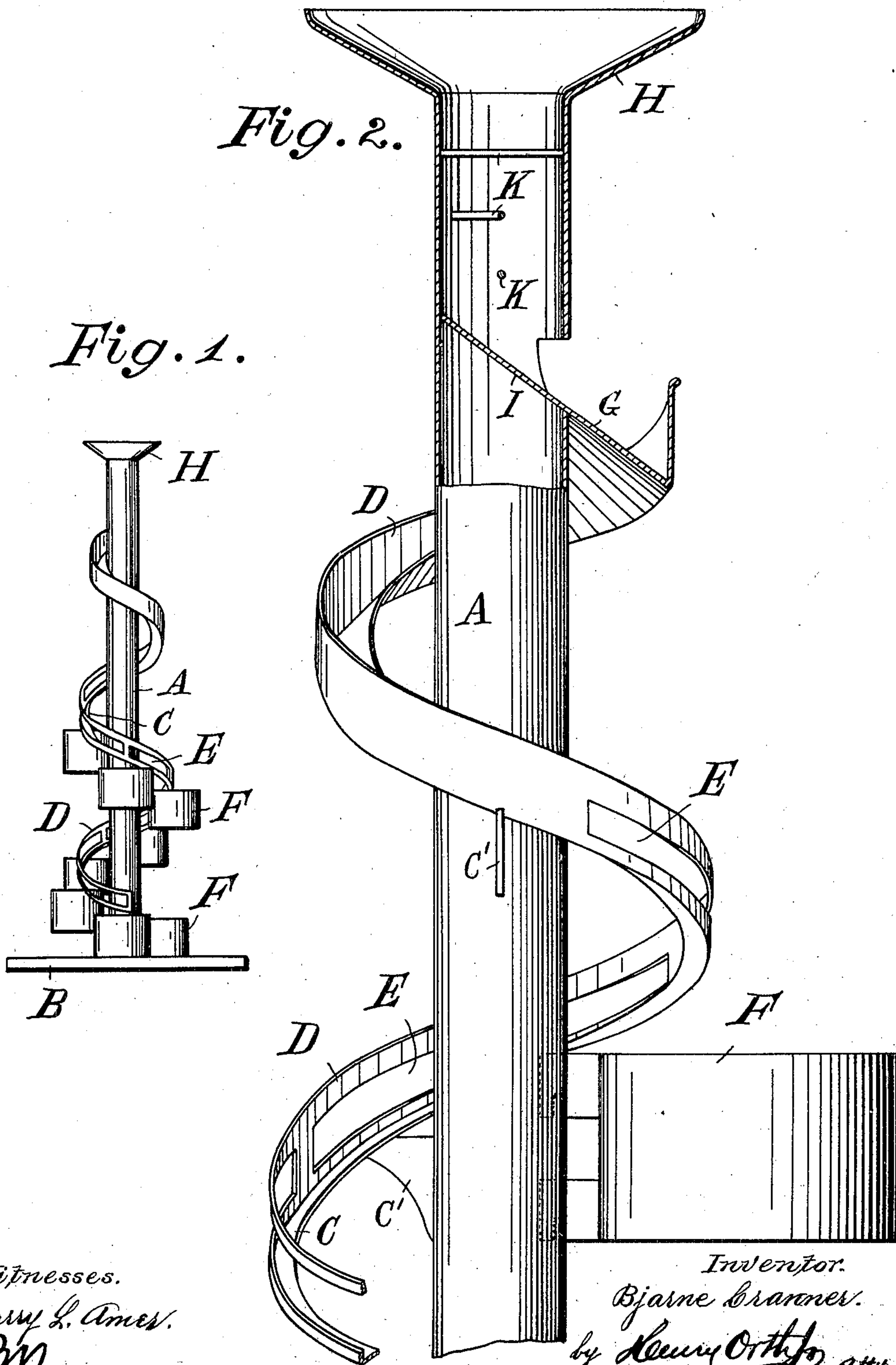
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B. CRANNER.

APPARATUS FOR SORTING OR SEPARATING COINS.

APPLICATION FILED MAR. 27, 1905.



Witnesses.
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UNITED STATES PATENT OFFICE.

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APPARATUS FOR SORTING OR SEPARATING COINS.

No. 812,327.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BJARNE CRANNER, a subject of the King of Sweden and Norway, residing at Kongsberg, Norway, have invented certain new and useful Improvements in Apparatus for Sorting or Separating Coins; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to means for sorting or separating coins, and has for its object an improved apparatus for this purpose which is of a very simple construction and of great efficiency.

My invention consists in combination of means and arrangement of parts, which will be hereinafter explained with reference to the annexed drawings, showing a preferred form of my apparatus, and which will be pointed out in the claims.

In the drawings, Figure 1 shows a front view of the apparatus, and Fig. 2 an enlarged side view, partly in section, of the top portion of the same.

A is a central, preferably hollow, post secured to a foot B. Around this post in a screw line is mounted a slope or rail C, on which the coins are caused to roll down, the slope being carried by brackets C', projecting from the post. On the external side of the slope there is a wall or back D, against which the coins lean when rolling down the slope. This wall has a number of apertures E, the height of which is increasing from the upper to the lowermost one, each of the apertures corresponding in height to the diameter of different coins. The coins rolling down the slope and being by the centrifugal force pressed outwardly against the wall will tip out through one of the apertures and drop into a cup F, there being a number of such cups, one for each kind of coins, placed on the base-plate B or hung on the post or underneath the slope. It will be understood that the actual height of the apertures should not be made as large as the diameter of the coins, there remaining a rib at the foot of the wall, so that the diameter of the coins will have to correspond with the distance from the rail to the upper line of the aperture. The upper

part of the slope is made of increasing width and is outwardly inclined in the manner shown in the drawings, terminating in an incline G, which extends to the post and forms a continuation of an inclined bottom or abutment within the post, the latter being at this point apertured, as shown. The upper part of the post forms a chute, through which the coins are dropped. On top of the post there is a collar H, and within the chute cross-bars K are placed, which to some degree defer the coins in descending to the incline I and prevent them from choking up the chute if a great lot of coins is at once thrown into the chute. When a coin slides down the incline I G, it comes into rolling contact with the wall D, and as the latter is helical the centrifugal force will successively lift the coin from the inclined rail and force it against the wall, whereupon it will roll down the rail till it is thrown out through an aperture in the wall.

I claim—

1. In a coin-sorting apparatus, a helical rail on which the coins roll, a vertical or nearly-vertical wall at the external side of said rail having coin-apertures therein, and means to give the coins such inclined position relatively to the axis of the helical rail that they are automatically lifted to roll on edge under the influence of the centrifugal force.

2. In a coin-sorting apparatus, a helical rail on which the coins roll, a vertical or nearly-vertical wall at the external side of said rail having coin-sorting apertures therein, and an incline to give the coins such inclined position relatively to the axis of the helical rail that they are automatically lifted to roll on edge under the influence of the centrifugal force.

3. In a coin-sorting apparatus, a helical rail on which the coins roll, a vertical or nearly-vertical wall at the external side of said rail having longitudinal coin-sorting apertures therein, and an incline at the upper end forming a continuation of the rail adapted to give the coins such inclination relatively to the axis of the rolling-path that they are automatically lifted to roll on edge under the influence of the centrifugal force.

4. In a coin-sorting apparatus, a helical rail, a vertical or nearly-vertical wall at the external side of said rail having longitudinal coin-sorting apertures therein, the successive apertures increasing in height, and a continuation of the rail at the upper end having such

inclination as to cause the coins to be automatically lifted to roll on edge under the influence of the centrifugal force.

5 In a coin-sorting apparatus, a post, a helical rail carried by the same, a wall at the outer edge of the rail having coin-sorting apertures therein, a chute on the post having a bottom to direct coins onto the rail and of such inclination as to cause the coins to auto-
10 matically turn on edge under the influence of the centrifugal force given by the rail.

6. In a coin-sorting apparatus, a post, a chute mounted thereon, means in the chute to prevent the coins from choking the same,
15 a vertical or nearly-vertical wall, an inclined helical rail connecting the chute and wall, said chute and rail having such inclination as to cause the coins to automatically turn on edge under the influence of the centrifugal
20 force given by the rail.

7. In a coin-sorting apparatus, a central post, a hopper mounted thereon, a chute fed from said hopper, cross-bars in the chute, an inclined bottom in said chute, a helical rail
25 forming a continuation of said bottom and

supported by said post, a vertical or nearly-vertical wall at the outer edge of said rail and having longitudinal coin-sorting apertures therein.

8. In a coin-sorting apparatus, a central
30 hollow post having a lateral aperture near its top, a hopper mounted on the top, cross-bars mounted in the post beneath the hopper, an incline in the post beneath the cross-bars, a helical rail mounted on the exterior of the
35 post and forming a continuation of the incline, a vertical or nearly-vertical wall at the outer edge of said rail having longitudinal coin-sorting slots therein, and a receptacle supported by the post in close proximity to
40 each slot to receive the coins falling through said slots.

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

BJARNE CRANNER.

Witnesses:

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