J. TORRES.

CROWN CAP ASSORTING MACHINE.

APPLICATION FILED JULY 9, 1913.

1,118,972.

Patented Dec. 1, 1914.

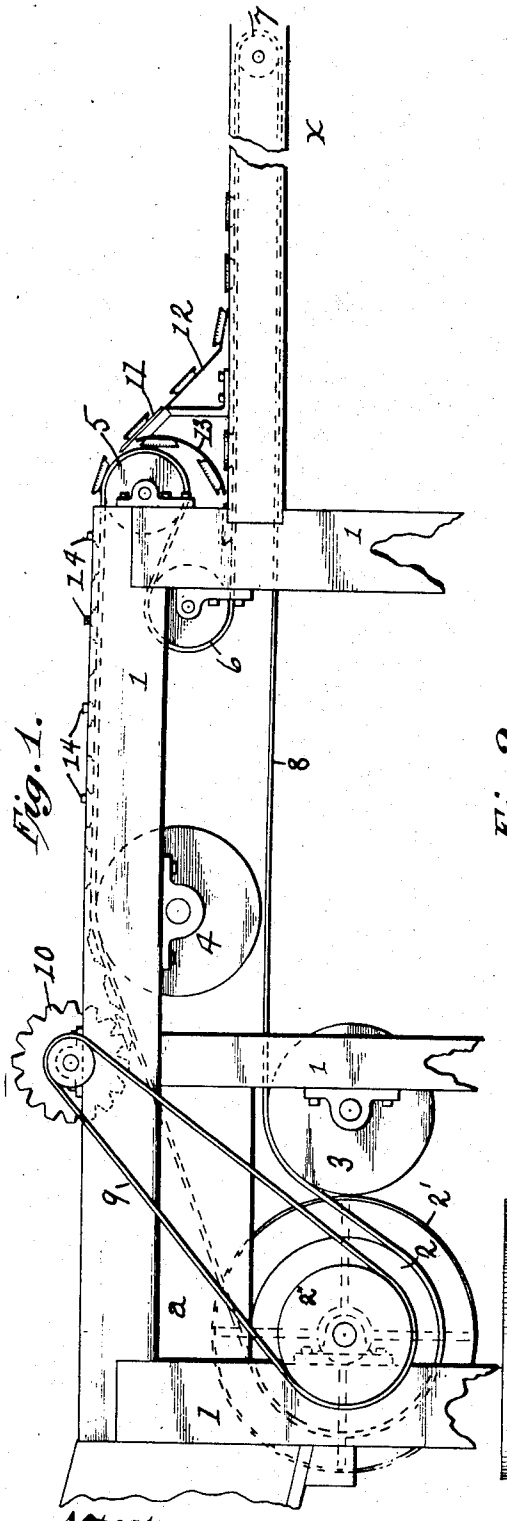


Fig. 1.

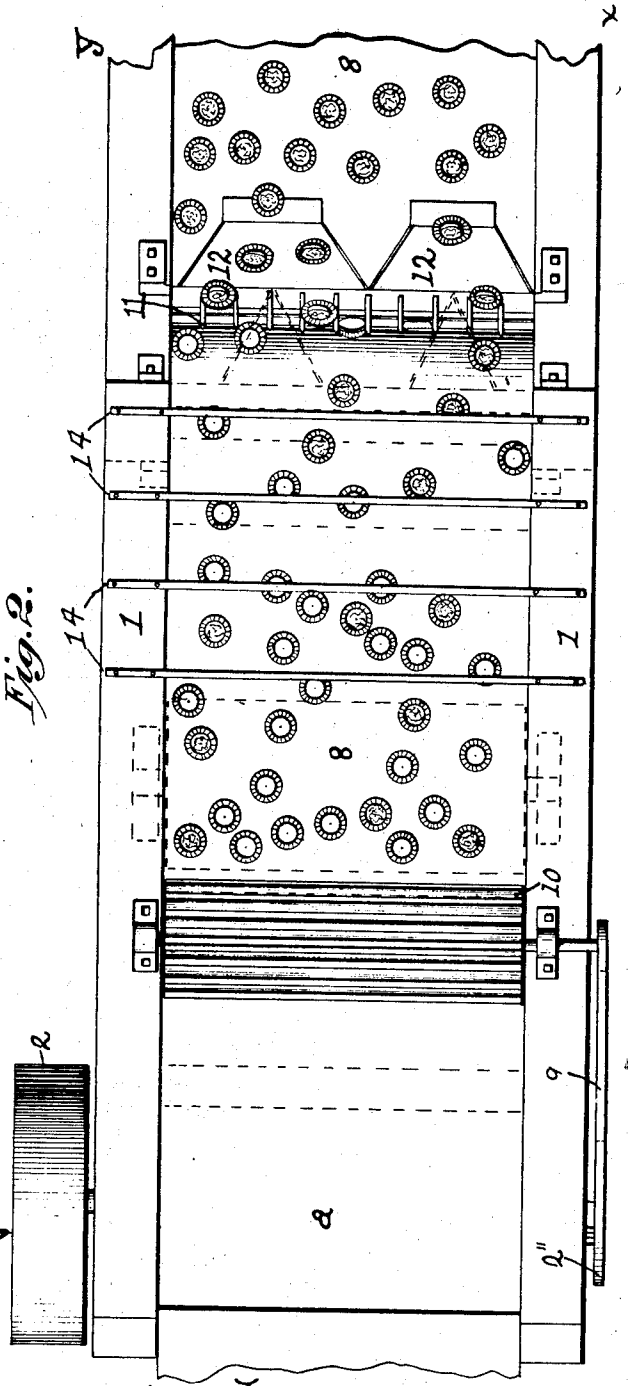


Fig. 2.

Witnesses:

D. Mintz

Jose Torres, Inventor:

by Robt B Killgore Atty

UNITED STATES PATENT OFFICE.

JOSE TORRES, OF NEW YORK, N. Y.

CROWN-CAP-ASSORTING MACHINE.

1,118,972. Specification of Letters Patent. Patented Dec. 1, 1914.

Application filed July 9, 1913. Serial No. 778,053.

To all whom it may concern:

Be it known that I, JOSE TORRES, a citizen of the United States, residing in the borough of Richmond, city of New York, in the county of Richmond and State of New York, have invented certain new and useful Improvements in Crown-Cap-Assorting Machines, of which the following is a specification.

My invention relates to machines for use in assorting crown caps for bottle sealing and my object is the production of a machine into which the caps may be placed in an indiscriminate mass and automatically carried cork side up past the inspectors who may remove the defective caps without handling the perfect ones.

In the past it has been necessary for the inspectors to handle all the caps, turn such of them as may be reversed cork side up and then pick out the defective ones. My machine makes it possible for the inspectors to examine greater numbers of caps with less effort as all they have to do is to look for the imperfect ones and remove them from the machine.

Figure 1 is a side view of my machine and Fig. 2 a plan view of the structure of Fig. 1.

The machine consists of a frame 1 having the main driving pulley 2 and the pulleys 3, 4, 5, 6 and 7 mounted therein around which an endless belt 8 passes. This belt 8 passes from the driving pulley 2 up an incline to the pulley 4, around pulley 5 and down to pulley 6 which is below and behind pulley 5, thence around pulley 7, back over pulley 3 and onto the driving pulley 2.

Motion is imparted to the driving pulley 2 by a belt on the pulley 2′ mounted on the main shaft. A third pulley 2″ on the main shaft carries an endless belt 9 which revolves the distributer cylinder 10 located above the belt 8.

The rear end of the frame marked *a* is boxed in to form a hopper, the inclined floor of which is a portion of the belt 8, to receive the mass of caps.

On driving the belt 8 the caps in the hopper *a* are carried up the belt passing under the distributer cylinder 10 which spreads them over the belt 8.

To further assist in the distribution of the caps over the belt 8 guide bars 14, 14, are located over the belt between the distributer cylinder 10 and the hereinafter described reversing mechanism.

It is obvious that some of the caps will come up the belt from the hopper with the cork side uppermost and some with the tin or metal side uppermost. For proper inspection they must all be cork side uppermost so the inspectors can detect and remove the defective caps. The caps will all travel on the belt until the selecting fingers 11 are reached adjacent to the pulley 5. Such caps as are cork side up will pass over the fingers and back onto the belt 8 over the chutes 12. Such caps as are metal side up will strike and pass under the fingers sliding down the turning chute 13 to land cork side up on the belt 8 which meantime has passed around pulley 6. The inverted caps then travel on the belt and follow the initially correctly positioned caps past the inspectors at *x* and *y* where any defective ones are observed and removed before the caps reach the pulley 7 where they leave the machine.

I claim:—

1. In a crown cap assorting machine the combination of a hopper adapted to receive a mass of caps, a traveling belt, selecting fingers adjacent to the belt, a reversing chute adjacent to the fingers whereby caps which are cork side down pass under the fingers, down the reversing chute and fall properly positioned on the belt.

2. In a crown cap assorting machine the combination of a traveling belt, a first pulley, a second pulley below and behind the first, around which pulleys the belt passes, selecting fingers adjacent to the first pulley, a reversing chute directed from the fingers to the second pulley down which wrongly positioned caps pass to the belt, a second chute directed from the fingers to the belt and away from the second pulley down which correctly positioned caps pass.

3. In a crown cap assorting machine the

combination of a frame, pulleys in said frame, a belt on said pulleys a hopper at one end of said frame adapted to receive a mass of caps, a distributing cylinder adjacent to the hopper and belt and means adjacent to the belt for reversing caps which are cork side down.

4. In a crown cap assorting machine the combination of a frame, pulleys in the frame, a belt passing over the pulleys, guide bars over the belt for distributing caps thereon and means adjacent to the belt for reversing caps which are cork side down.

In testimony whereof I have affixed my signature in presence of two witnesses.

JOSE TORRES.

Witnesses:
ROBT. B. KILLGORE,
D. MINTZ.