March 4, 1924. 1,485,543

A. S. WYSONG

PRINTING MACHINE

Filed Jan. 9, 1922

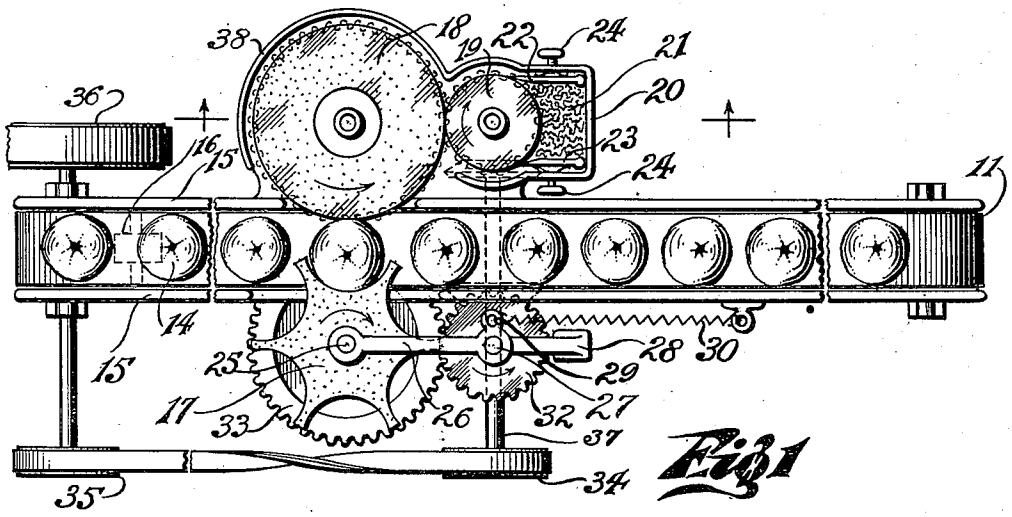


Fig. 1

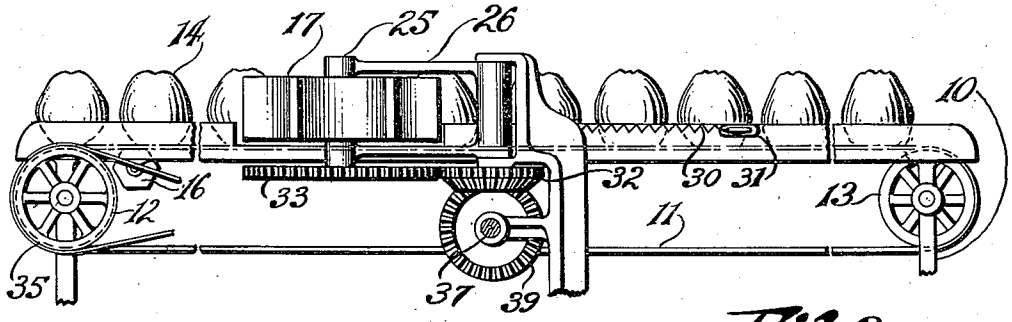


Fig. 2

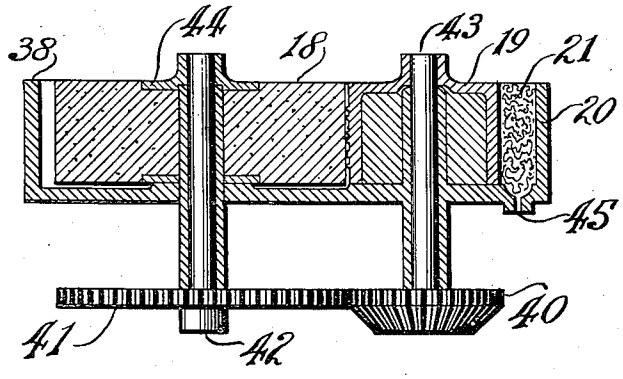


Fig. 3

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UNITED STATES PATENT OFFICE.

ANSEL S. WYSONG, OF LONG BEACH, CALIFORNIA.

PRINTING MACHINE.

Application filed January 9, 1922. Serial No. 527,850.

To all whom it may concern:

Be it known that I, ANSEL S. WYSONG, a citizen of the United States, residing at the city of Long Beach, in the county of Los Angeles, State of California, have invented new and useful Improvements in Printing Machines, of which the following is a specification.

My invention relates to a printing machine primarily designed for printing on fruits such as apples and oranges and the like, a trademark or design to distinguish such fruit from other fruit in the market, and the object thereof is to produce a simple and inexpensive machine for that purpose. My machine can also be used for printing on cans and other like objects.

In the drawings forming a part of this application Fig. 1 is a top plan of my machine. Fig. 2 is a side elevation. Figs. 3 and 4 are enlarged details of certain of the parts.

I will describe my machine for printing a mark on apples.

Referring to the drawings 10 is the frame of the machine in which is mounted a traveling belt 11 of such length as may be desired and travels over rollers 12 and 13. This belt is suitably driven by power not shown. Apples 14 are fed from a hopper not shown upon belt 11 in a single line and are held from rolling off the belt by side timbers 15. Below the upper portion of the belt is shaker wheel 16 that shakes the belt to cause the apples to rest on the belt on the stem end when that is the heaviest end. As the apples are carried on the belt each apple is engaged by turnstile wheel 17 and brought into engagement with the transfer or printing wheel 18 and the mark or character on the surface thereof which engages the apple is or are transferred to the apple. Wheel 18 has a soft yielding spring surface that permits a portion of the apple to embed itself in the wheel and after the apple has passed such portion springs out, being substantially of the same construction as the offset balls of Patent 1,365,879. The mark or characters are placed on wheel 18 by said wheel engaging intaglio wheel 19 in whose surface the mark to be printed on the apple is formed by engraving or etching. At the other side of wheel 19 is an ink reservoir 20 in which ink 21 of suitable consistency is placed. At the edges of reservoir 20 are knives 22 and 23. Knife 22 removes from the surface of wheel 19 anything that may be resting thereon so that the wheel comes in contact with the ink with a clean surface. Knife 23 removes from wheel 19 all the ink on the surface thereof as the wheel emerges from the fountain except that in the engraved mark which is transferred to wheel 18 when the two wheels engage. These knives have sharp flexible edges and the pressure of the edges thereof on roll 19 is regulated by set screws 24. The apple after receiving the mark travels on the belt until the ink is dry, which can be hastened by suitable drying means not shown. Turnstile wheel 17 is mounted on axle 25 which is carried by arms 26 pivotally mounted in the frame by shaft 27. The other ends of arms 26 carry balancing weights 28. One of arms 26 has a lug 29 just above shaft 27 to which the end of spring 30 is attached so that the turnstile will yieldingly hold in spring pressed engagement the apple with the printing roll 18 whether it be large or small. The other end of spring 30 is secured to lug 31 which is secured to the frame by screws or bolts so that it can be changed to tension the spring if desired. On shaft 27 is a gear 32 which meshes with a gear 33 secured to the turnstile wheel. Shaft 27 and wheel 18 are suitably driven so that an apple in the turnstile wheel will register with a mark on the printing wheel.

By this construction a cheap and efficient machine for printing marks on fruits is provided.

Having described my invention I claim:

1. In a printing machine a frame; a belt adapted to travel and carry objects on its upper surface mounted in said frame; a printing roll revolubly mounted in said frame adjacent to the side of said belt; means to place characters in ink on said roll; and means at the side of said belt to cause the objects on the belt to engage the printing roll, said means being adapted to move toward or away from the printing roll to permit objects of different sizes to pass and to position the object so that it will engage the character on the roll, whereby the characters are transferred from the roll to the object.

2. In a printing machine a frame; a belt adapted to travel and carry objects on its upper surface mounted in said frame, a printing wheel having a yielding transfer surface; means to place characters in ink on

said surface; a turnstile wheel adapted to cause objects on said belt to engage said printing wheel at points having characters thereon.

3. In a printing machine, a frame; an ink reservoir mounted in said frame; a printing wheel having a yielding transfer surface mounted in said frame; an intaglio wheel mounted in said frame and forming one wall of said ink reservoir and adapted to carry ink from the reservoir and place it on the printing wheel; a scraper to remove the surplus ink from said intaglio wheel; a belt adapted to travel adjacent to said printing wheel and carry objects on its upper surface; and a turnstile wheel adapted to cause the objects on said belt to engage said printing wheel at points having characters therefor.

In witness that I claim the foregoing I have hereunto subscribed my name this 28th day of December, 1921.

ANSEL S. WYSONG.