Dec. 3, 1935. H. M. SMALLEN 2,022,831

IDENTIFICATION BRANDING MACHINE

Filed Dec. 19, 1931 2 Sheets-Sheet 1

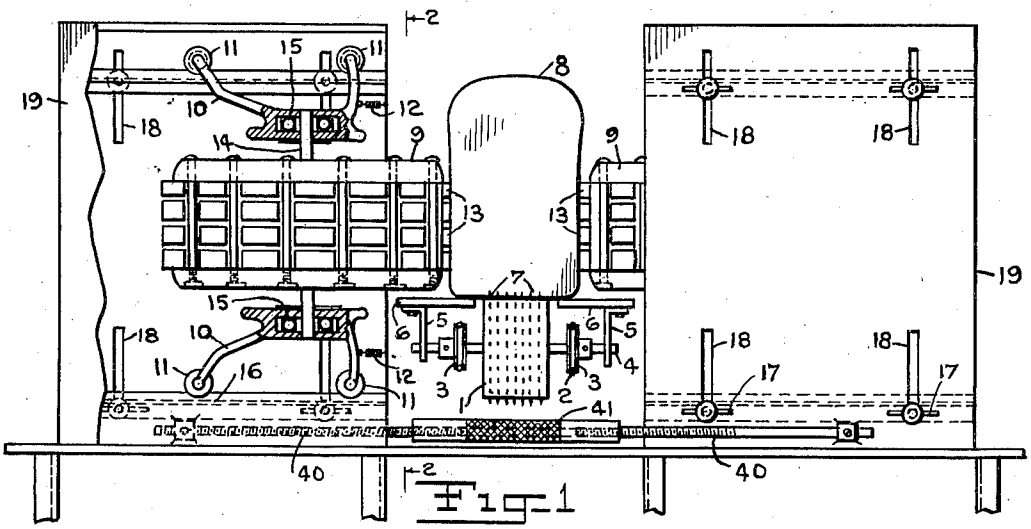


Fig-1

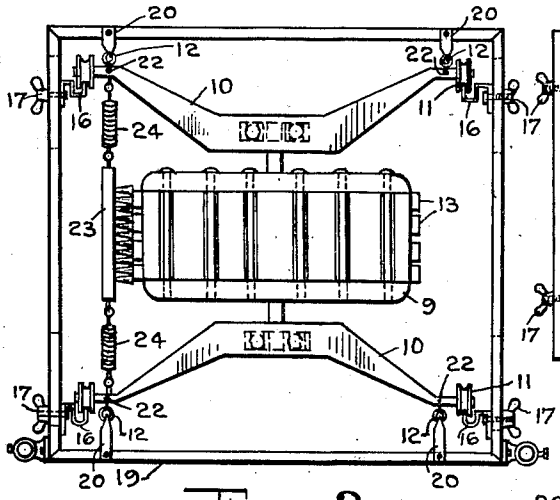


Fig-2

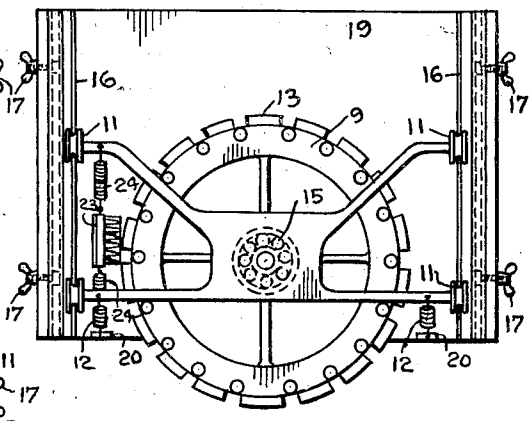


Fig-3

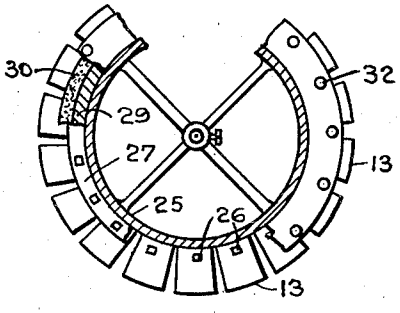


Fig-4

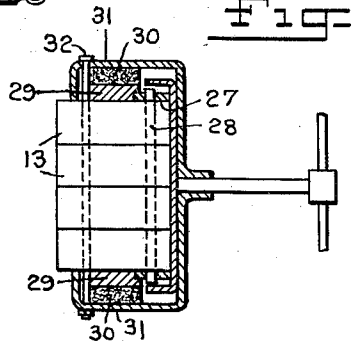


Fig-5

INVENTOR

Harry M. Smallen

BY Thompson & Hill.

ATTORNEY

Dec. 3, 1935. H. M. SMALLEN 2,022,831

IDENTIFICATION BRANDING MACHINE

Filed Dec. 19, 1931 2 Sheets-Sheet 2

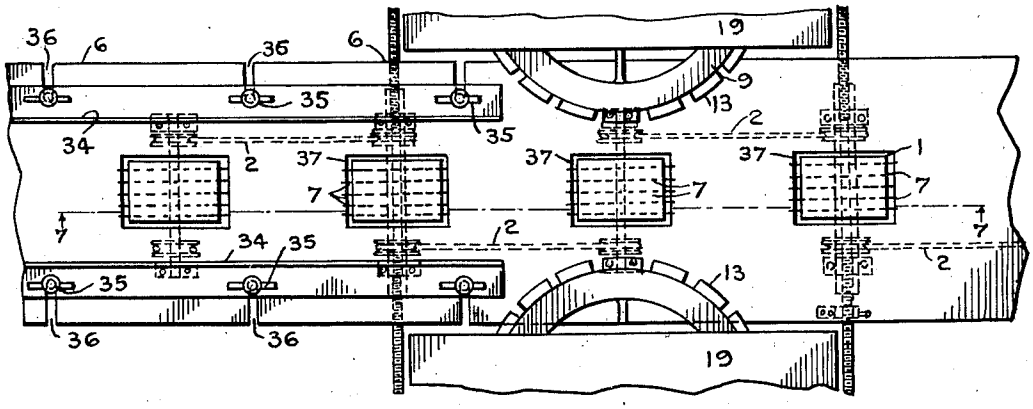


Fig-6

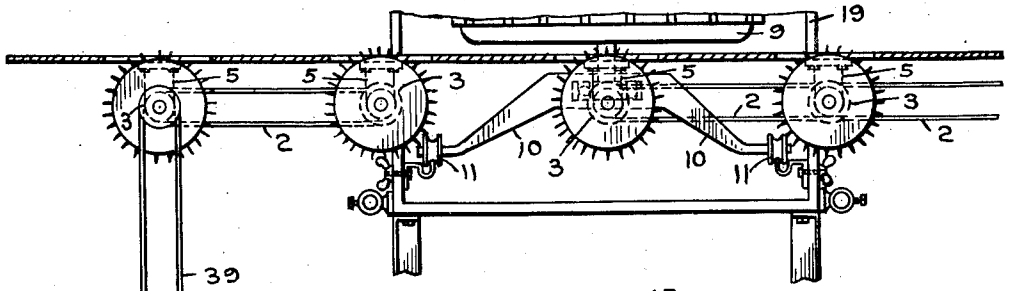


Fig-7

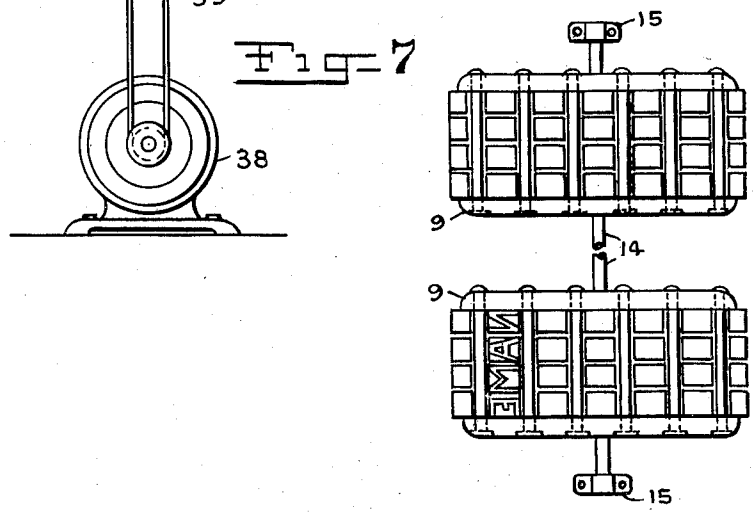


Fig-8

INVENTOR
Harry M. Smallen
BY Thompson & Hill
ATTORNEY

Patented Dec. 3, 1935

2,022,831

UNITED STATES PATENT OFFICE

2,022,831

IDENTIFICATION BRANDING MACHINE

Harry M. Smallen, Brooklyn, N. Y.

Application December 19, 1931, Serial No. 582,103

4 Claims. (Cl. 101—8)

My invention relates to improvements in a branding machine that includes two oppositely placed die carriages, yieldingly suspended for the purpose of impressing a brand or mark of identification on any brandable object, but is especially intended for loaves of bread, the movement of the die holders being effected by the brandable object itself as it comes between the oppositely positioned die wheels, the movement of the brandable object being effected by pin drums piercing the base of it.

The object of my invention is to imprint a brand of identification on a loaf of bread so that it will appear on each slice cut therefrom whether the bread is sliced at the bakery before it is wrapped, (which is now a common practice) or at home.

One form of the invention is illustrated in the accompanying drawings in which Fig. 1 is a vertical elevation partly in section and partly broken away, showing the machine assembled. Fig. 2 a view looking from right to left at parts of the machine on the line 2—2 of Fig. 1. Fig. 3 is a plan view looking down upon the left side of the machine shown in Fig. 1 with the top removed. Fig. 4 is a detail, partly in section and partly broken away showing the branding wheel. Fig. 5 is a cross section of the branding wheel. Fig. 6 a plan view of the center parts of the machine shown in Fig. 1. Fig. 7 is a side elevation partly in section looking at Fig. 6, and Fig. 8 shows a superposed arrangement of branding wheels.

The needle-pointed cylinder 1, is rotated by a belt 2, which engages wheel 3, that is secured to axle 4, which is held in position by brackets 5, firmly secured on underside of the table 6. The points or spikes 7, penetrate the base of bread 8, conveying it to and through the passage between the oppositely positioned branding wheels 9—9, causing the wheel carriages 10 to move with the wheels 11 against the action of the springs 12, thereby causing the dies 13 to move and press into the bread while it is in motion. The die wheels 9 revolve on a shaft 14, each end of which firmly rests in a bearing 15, which is securely seated in the frame 16. The wheels 11 of the supporting carriages 10, ride on rails 16, which can be raised or lowered by adjustment of winged nuts 17, which slide up and down the slits 18 in the sides of the carriage housing 19. One end of the spring 12 is attached to free end of upright rod 20, the other end of the rod being firmly attached to housing frame 19, the other end of spring 12 being attached to die carriage frame at point 22.

The brush 23, made of heat resisting bristles, is suspended by springs 24, and comes in contact with the dies 13, cleaning them of any deposit that may adhere thereto.

A modified form of die holder construction is illustrated in Fig. 4 which shows wheel 25 in the channel rim of which are seated the dies 13, which have square holes 26 through their lower half. 27 is a flat metal ring having square holes registering with holes in the dies, through which a square pin 28 is passed, engaging both the dies and the ring, thus preventing movement of the dies 13 when in operation. 29 is a heating element coming in direct contact with part of die and the ring 27. Electric current is suitably connected to the heating element, and may be controlled by a suitable heat regulating switch. 30 is an asbestos pad that insulates the heating element, and 31 indicates one half of the outer frame of the die holder. 32 is a screw that holds the upper and lower halves of frame together.

The guide walls 34 are adjustable by turning screws 35, set in the channels 36, grooved in the table 6 for the accommodation of loaves of bread of different widths, and serve to guide the bread in exact position towards the branding units to assure equalized pressure on both sides by the die holders. The openings 37 in the top of the table 6 permit the pins 7 to project slightly above the surface of the table. The pins 7 enter and leave the bread in an almost vertical position assuring little resistance upon penetration into, or removal from the bread. The pin cylinders 1 beyond the branding units stabilize the bread by preventing side movement thereof, and convey it to the slicing or wrapping machine.

The wheels 3, on either side of the pin cylinders 1, serve to receive and transmit the power from cylinder to cylinder, which power is provided by the motor 38, and is transmitted to the receiving wheel 3 by belt 39, and is transmitted to the pin cylinders by alternating the position of belt 2.

Where the object to be branded is high, and it is desirable to place two or more marks of identification on each side, two or more die wheels 9 can be placed on one shaft 14, as shown in Fig. 8, thereby accomplishing the desired result. The threaded rods 40, are firmly attached at one end to base of housing 19, and are engaged at their free ends by a threaded cylinder 41, the turning of which brings the die carriage housings together or separates them as may be desired to accom-

modate loaves of bread of various widths while maintaining correct positioning.

I claim:

1. In a machine of the class described, pin faced drums over which the articles to be marked are fed, said drums positioning said articles while the same are being marked, means for marking said articles, and a resiliently mounted brush for cleaning the face of said means.

2. In a machine of the class described, pin faced drums over which the articles to be marked are fed, said drums positioning said articles while the same are being marked, means for marking said articles, said means including oppositely positioned rotatable marking wheels, resiliently mounted carriages therefor, and guides permitting movement of said carriages at right angles to the feed of said articles.

3. In a machine of the class described, means for feeding the article to be marked, marking means therefor mounted upon carriages at opposite sides of said article, and resilient means for projecting the same thereagainst, cleaning means resiliently projected against said marking means.

4. In a machine of the class described, means for feeding the article to be marked, marking means therefor mounted upon carriages at opposite sides of said article, and resilient means for projecting the same thereagainst, cleaning means resiliently projected against said marking means, and means in combination therewith for separating or bringing together said marking and cleaning means.

HARRY M. SMALLEN.