

W. F. WALKER.
MACHINE FOR DECORATING CONFECTIONS.
APPLICATION FILED APR. 18, 1910.

990,175.

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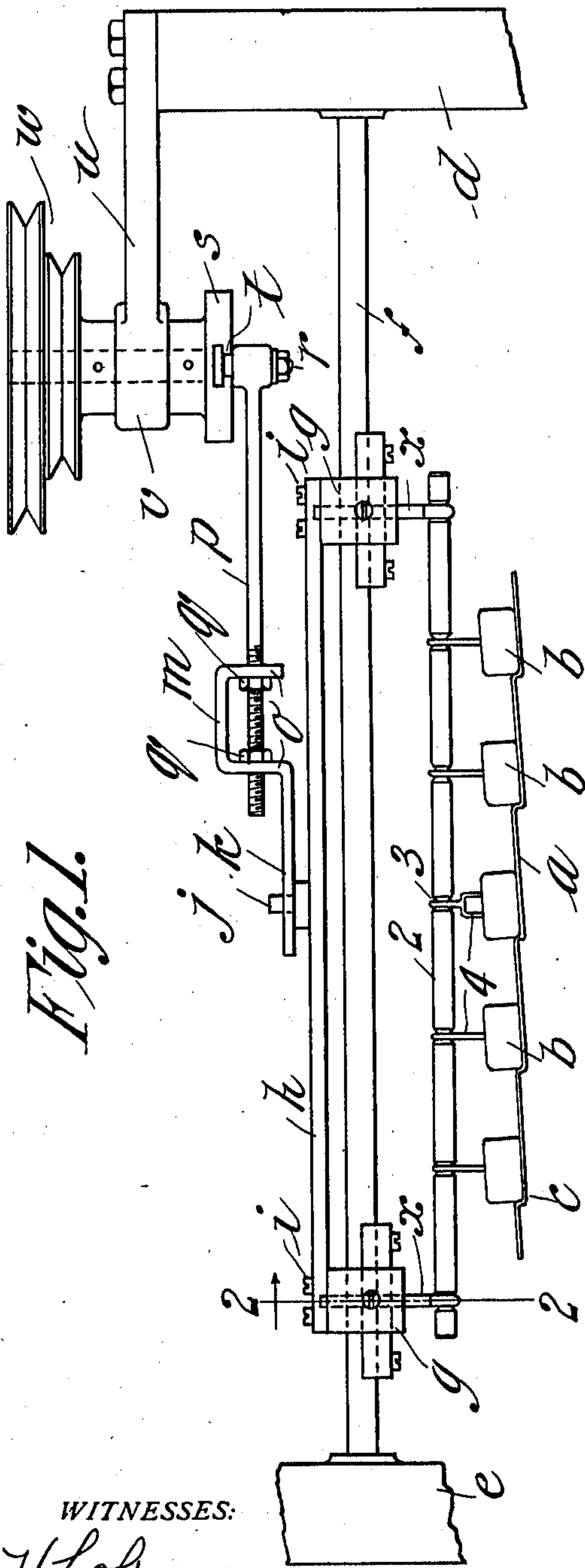


Fig. 1.

Fig. 4.

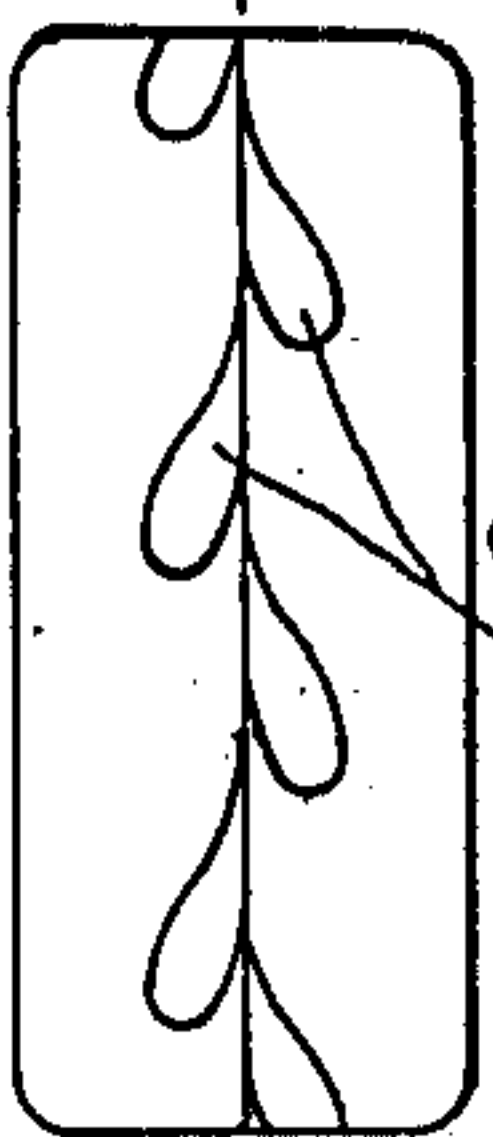


Fig. 3.

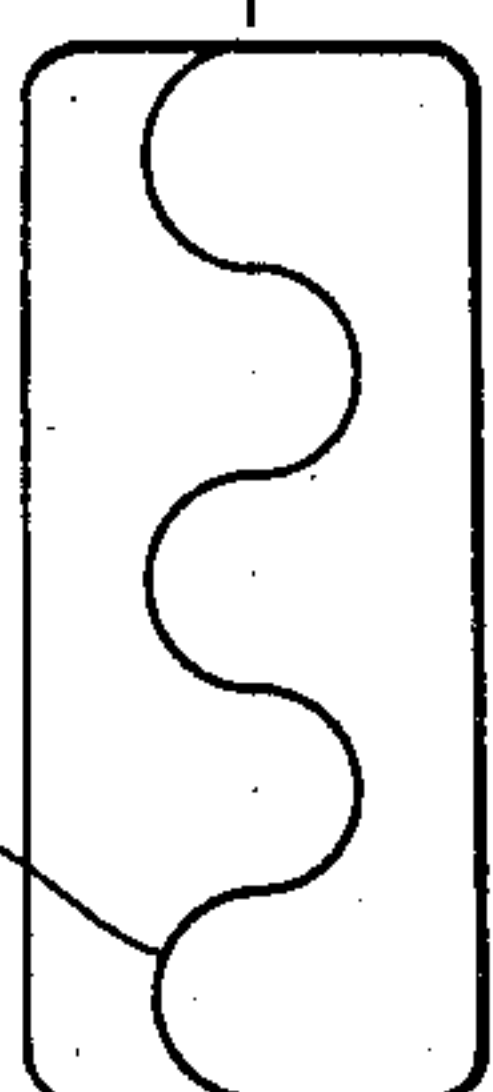


Fig. 6.

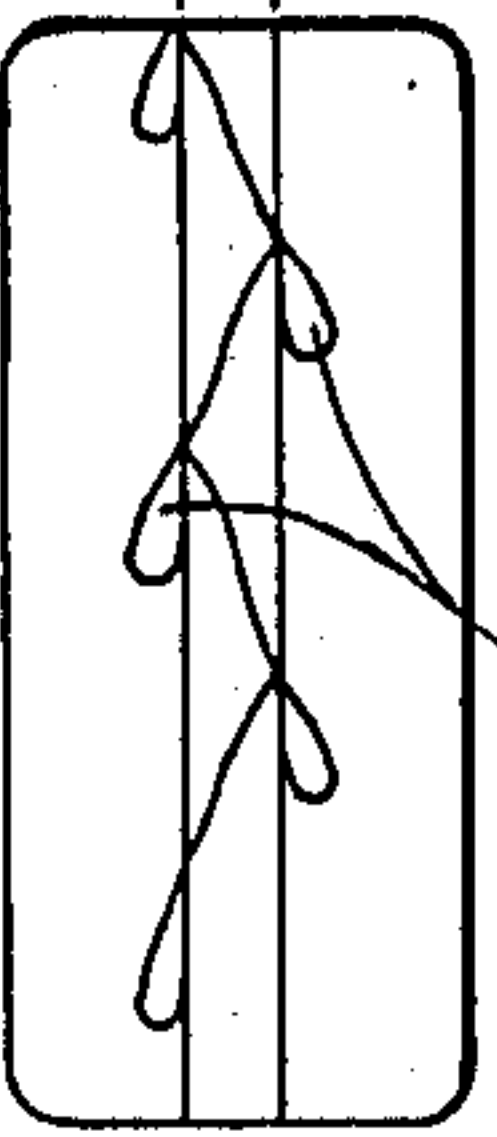


Fig. 5.

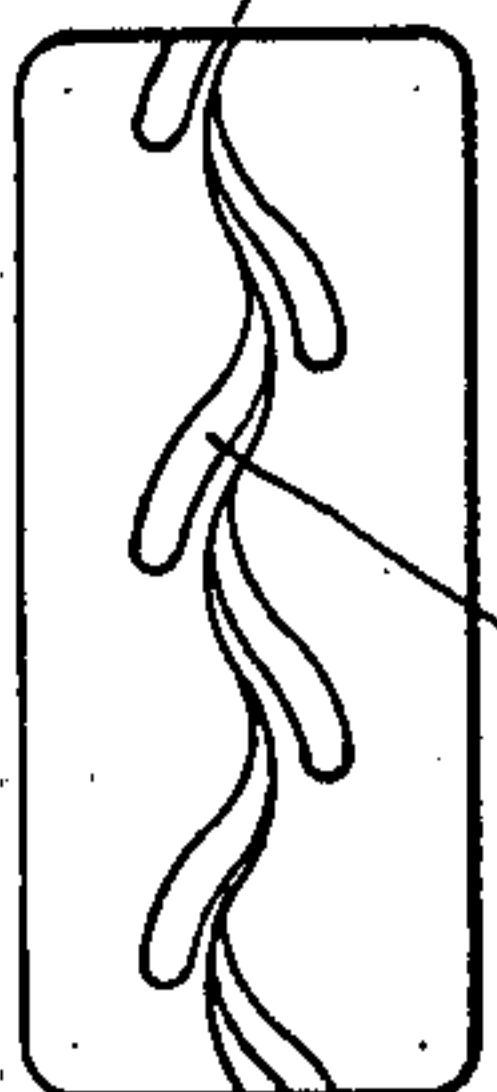
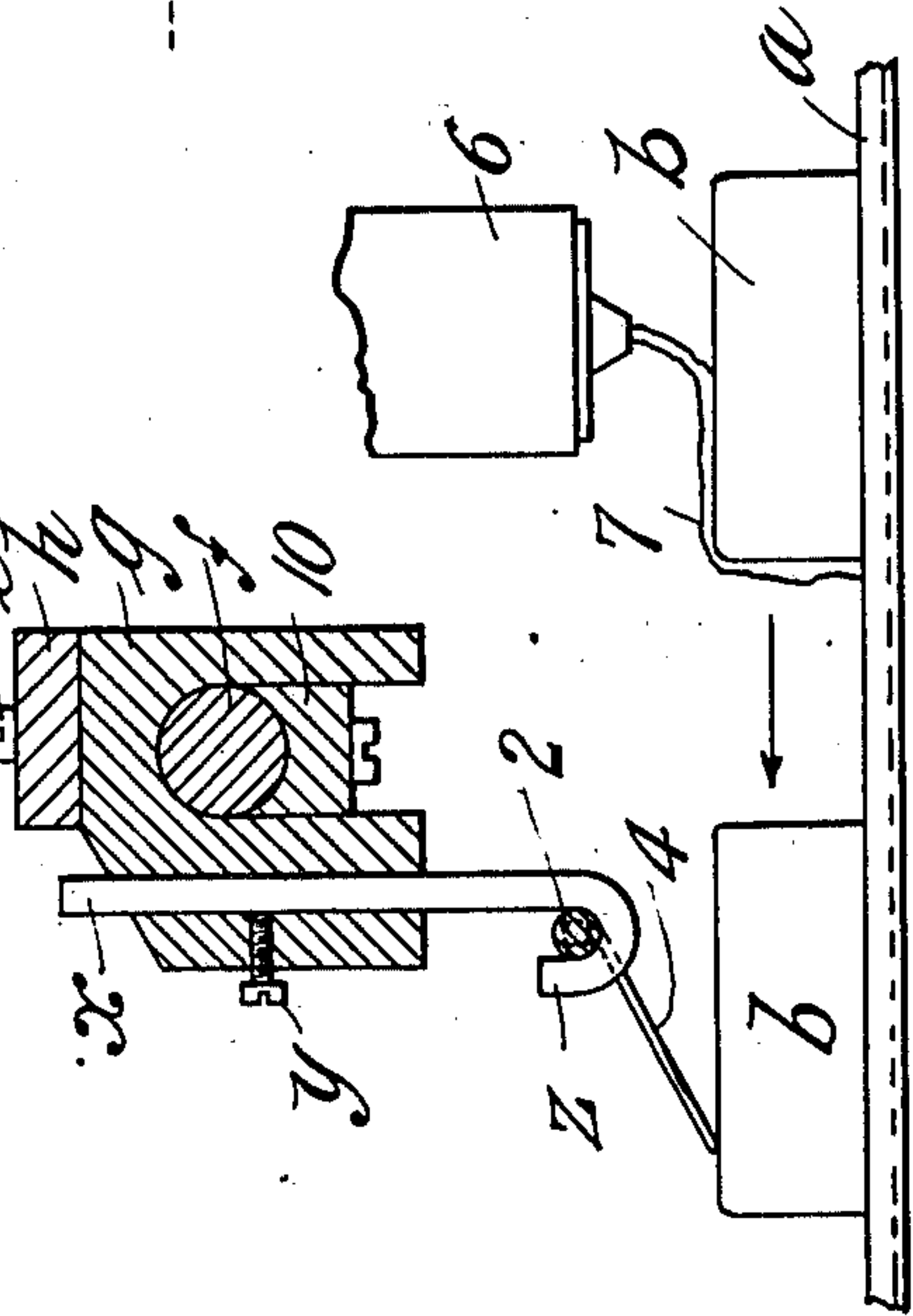


Fig. 2.



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MACHINE FOR DECORATING CONFECTIONS.

990,175.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WALTER FITCH WALKER, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Machines for Decorating Confections, of which the following is a specification.

This invention relates to improvements in the manufacture of confections; the object of the invention being to provide mechanisms by means of which confections of various kinds may be suitably decorated or provided with ornamentation.

It is the common practice, especially in the manufacture of chocolates or other candies, to provide the upper surface with various designs in order to enhance their appearance, and this ornamentation has generally been performed by hand.

A further object of the invention is to provide means for varying the shape or appearance of the ornamentations.

In the drawings forming part of this application,—Figure 1 is a view in end elevation of my improvement showing means for reciprocating the ornamenting devices and the conveyer-belt for the confections. Fig. 2 is a transverse sectional view on the line 2—2, Fig. 1 showing the means for adjustably supporting the wire elements or fingers by means of which the confections are decorated. This figure also illustrates, in outline, the receptacle which contains the liquid-ornamenting material and located in proximity to the finger elements. Figs. 3, 4, 5, and 6 are views of various forms of ornamentation.

Referring to Fig. 1, *a* designates an apron or conveyer-belt for supporting the confections thereon, as shown at *b*. This conveyer-belt is adapted to be moved by any suitable means and is preferably provided on its upper surface with recessed portions, as shown at *c*, whereby the confections will all be placed in axial alignment with each other when they are passed through the machine. The construction of the conveyer-belt and its mode of operation, however, form no part of my invention.

d and *e* designate fixed parts of the machine on which is supported a cross-bar *f* that supports a pair of sliding blocks *g*

which are connected together by means of a bar *h*, and secured thereto by means of the bolts *i*.

Pivotaly attached to the bar *h* by means of a pin *j* is a bar *k* that is provided with a U-shaped bend *m* through the sides *o* of which passes a threaded connecting-rod *p* which is provided with two adjusting lock-nuts *q*. The opposite end of the rod *p* is attached to a crank-pin *r* that is adjustably secured to the wheel *s* in a diametrically arranged groove *t* whereby the stroke of the bar *k* may be varied.

u designates an arm that is secured to the standard *d* for supporting a bearing *v* through which passes the shaft for the driving-pulley *w*.

Adjustably secured in the guide-blocks *g* are hanger-rods *x* by means of the set-screws *y*; the lower ends of the rods *x* are provided with hook-shaped ends *z* in which are placed a bar 2 which has formed therein and spaced from each other the V-shaped channels 3. The distances between the channels 3 correspond to the distances between the recesses or indentations *c* of the conveyer-belt *a*. Loosely encircling these channels 3 are depending wires or fingers 4 which are adapted to engage the upper surface of the confections *b*, as shown, when they are moved under the rod 2 by means of the conveyer-belt *a*.

6 designates a suitable receptacle for containing the liquid chocolate or other substance used for the ornamentation and is so mounted as to have a transverse movement relative to the line of travel of the confections. This receptacle is located immediately over the confections *b* whereby, as the same are moved thereunder, a stream or layer of chocolates 7 is deposited thereon in a wavy line, as shown at 8, Fig. 3; and as the confections are moved past the receptacle to the position shown at the left of Fig. 2, the wavy line or layer of chocolate is engaged by the transversely reciprocating fingers 4; since these fingers are suitably reciprocated by means of the crank-wheel *s* and its connecting-rod, the wires 4 will trail through the chocolate or other material 7 causing this layer to assume various shapes or designs, as illustrated in Figs. 4, 5, and 6, at 9.

Fig. 4 illustrates the ornamentation pro-

duced when the finger 4 trails through the wavy layer of chocolate shown in Fig. 3 in a straight line: That is to say, the crank-pin r is then located in the groove t so as not to impart any reciprocating movements to the trailing fingers 4.

The design shown in Fig. 5 is produced by having the finger 4 reciprocate transversely to the line of travel of the confections, and engage the wavy line of chocolate shown in Fig. 3.

The design shown in Fig. 6 is produced by causing the wavy line of chocolate shown in Fig. 3 to be engaged by two of the trailing fingers 4, when the crank-pin r is set on the center, and no reciprocation is imparted to the fingers. In order to produce the wavy line 8, it is necessary that the receptacle be reciprocated transversely to the line of movement of the confections, the pitch of the wave, of course, depending upon the rate of travel of the confection.

Fig. 6 shows the design produced when the finger 4 is provided with two prongs or is fork-like.

It should of course be understood that more than one line of ornamentation may be simultaneously placed on the confection without departing from the spirit and scope of my invention, and that those forms shown herein are merely illustrative. 10 designates bearing-blocks in the blocks g by means of which any wear may be taken up.

What I claim, is:—

1. In an ornamenting machine of the class described, the combination with a fixed rod, a rod adapted for reciprocation and mounted

thereon, said rod having loosely depending fingers thereon and adapted to engage an article as it moves under the fingers, and means for reciprocating said rod transversely to the line of motion of the articles.

2. A confection-decorating machine having in combination with a fixed guide-rod, of guide-blocks mounted for reciprocation on said rod, means for reciprocating the blocks, a bar or rod pendant from the blocks and having a plurality of annular channels therein, and fingers loosely engaging the channels and adapted to engage a confection, as described.

3. A confection-decorating machine comprising pendant finger elements of wire, and means for reciprocating said elements in a horizontal plane.

4. In a machine for decorating confections which have received a wavy line of viscous material on their upper surface during a longitudinal movement of the same, the combination with pendant fingers adapted to swing in a vertical plane for engaging said material, and means for reciprocating said fingers transversely to the line of movement of the confections, as described.

5. In a confection decorating machine, the combination with pendant fingers, a bar for supporting said fingers, and means for causing the fingers to move either in a straight or a zigzag line, as described.

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Witnesses:

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