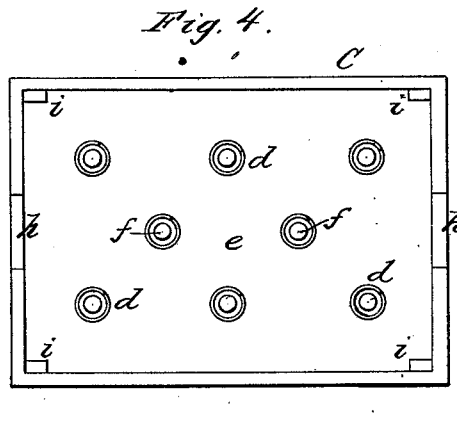
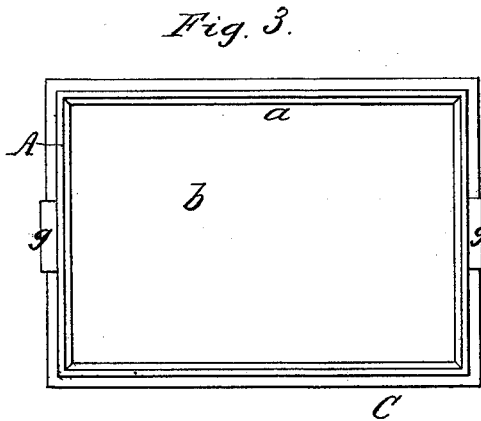
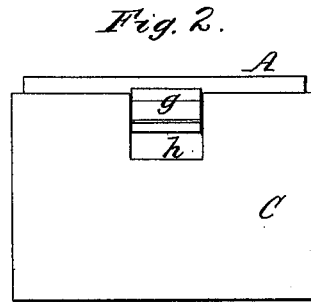
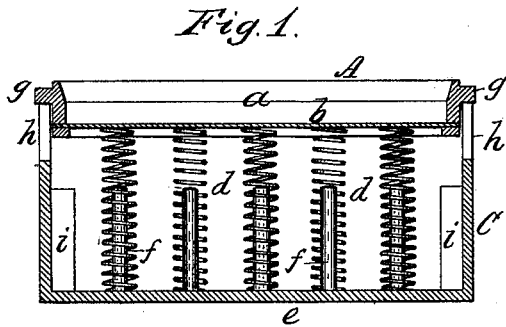


J. W. & A. RUGER.
 Apparatus for Coating Cakes with Sugar, &c.
 No. 213,453 Patented Mar. 18, 1879.



Witnesses:

Chas. S. Buchheit
Adm. J. Vorady

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UNITED STATES PATENT OFFICE.

JAMES W. RUGER AND AUGUSTUS RUGER, OF BUFFALO, NEW YORK.

IMPROVEMENT IN APPARATUS FOR COATING CAKES WITH SUGAR, &c.

Specification forming part of Letters Patent No. **213,453**, dated March 18, 1879; application filed December 18, 1878.

To all whom it may concern:

Be it known that we, JAMES W. RUGER and AUGUSTUS RUGER, both of the city of Buffalo, in the county of Erie, in the State of New York, have invented a new and useful Improvement in Apparatus for Coating Cakes with Sugar, &c., of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an apparatus for coating cakes made of soft dough with sugar, grated cocoa-nut, fruit, and similar substances. These cakes, whether made by machinery or by hand, are received or delivered upon pans or plates of sheet-iron, to which they adhere sufficiently to permit the pans being inverted and pressed with the cakes downward into a layer of sugar, or other substance with which it is desired to coat the cakes. Ordinarily, this substance is placed upon a fixed plate or table, and the cakes cannot be brought evenly into contact with the coating substance, owing to the irregular form of the pans, unevenness of surface of the layer of coating substance, or because the operator exerts more pressure upon one part of the pan than upon another. The cakes are consequently coated unevenly, and frequently flattened or otherwise pressed out of shape.

The object of this invention is the construction of a simple device which will enable the cakes to be evenly coated without requiring the exercise of particular care on the part of the operator; and our invention consists, principally, of a movable receptacle for the coating material, provided with a flexible bottom, and arranged in a stationary frame having yielding supports, bearing against the flexible bottom, whereby the flexible bottom is enabled to adapt itself to the irregularities of the pan, or the cakes, or the layer of coating material; also of certain details of construction, as will be hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a vertical section of our improved apparatus. Fig. 2 is an end elevation thereof. Fig. 3 is a top-plan view thereof. Fig. 4 is a similar view with the movable receptacle removed.

Like letters of reference designate like parts in each of the figures.

A represents the movable receptacle for the

coating material, consisting of a rectangular frame, *a*, made somewhat larger than the pans upon which the cakes are received, and a flexible bottom, *b*, constructed of rubber, cloth, or any other suitable material. C represents the stationary frame or box, made of a size sufficient to permit the insertion of a movable frame, A, which fits loosely within the upper portion of the frame C, so that the frame A can freely play vertically within the frame C. *d* represents spiral or other suitable springs, arranged within the stationary frame C, so as to bear against and support the flexible bottom *b* of the movable frame. As shown in the drawings, the springs *d* rest upon the bottom *e* of the frame C, and are held in an upright position by cylindrical pins or short posts *f*, secured to the bottom *e*. Any other suitable means for securing the springs may, however, be employed. *g* represents a handle, lug, or projection, secured to each end piece of the frame A, for manipulating the same; and *h*, a corresponding notch or recess formed in each end piece of the frame C, to permit the frame A, with its handle *g*, being depressed within the frame C. *i* represents stops secured to the sides of the frame C, to limit the downward movement of the frame A.

In operating with this apparatus the sugar, grated cocoa-nut, fruit, or other material with which it is intended to coat the cakes, is spread upon the flexible bottom *b* of the removable frame. The pan containing the cakes is then inverted and pressed down upon the layer of coating material. Each of the springs *d* is depressed according to the amount of pressure exerted upon that portion of the flexible bottom *b* lying directly above the respective spring, thus enabling the flexible bottom to adapt itself to the inequalities of the pans or cakes. Upon raising the pan away from the flexible bottom the reaction of the springs *d* produces a vibration in the flexible bottom, which causes the coating substance to fly up against the pan and cakes, thereby bringing the coating material in contact with such portions of the cakes as may have remained uncoated. In this manner the coating material is applied evenly to all parts of the cakes by simply depressing the inverted pan into the coating material. The possibility of throwing

an undue pressure upon any portion of the pan, and thereby causing the cakes to become deformed, is entirely avoided in our improved apparatus. When all the cakes have been coated the receptacle A can be removed from the stationary frame C, when, by inverting the receptacle A, the remaining coating material can be discharged into any suitable receptacle.

We claim as our invention—

1. The combination, with the movable receptacle A, provided with a flexible bottom, *b*, of the stationary frame or box C, having yielding supports, bearing against the flexible bottom *b*, substantially as and for the purpose set forth.

2. The combination, with the movable receptacle A, having a flexible bottom, *b*, of the stationary frame or box C, provided with posts or pins *f* and spiral springs *d*, substantially as and for the purpose set forth.

Witness our hands this 12th day of December, 1878, in the presence of two subscribing witnesses.

J. W. RUGER.
AUGUSTUS RUGER.

Witnesses:

JNO. J. BONNER,
EDW. J. BRADY.