

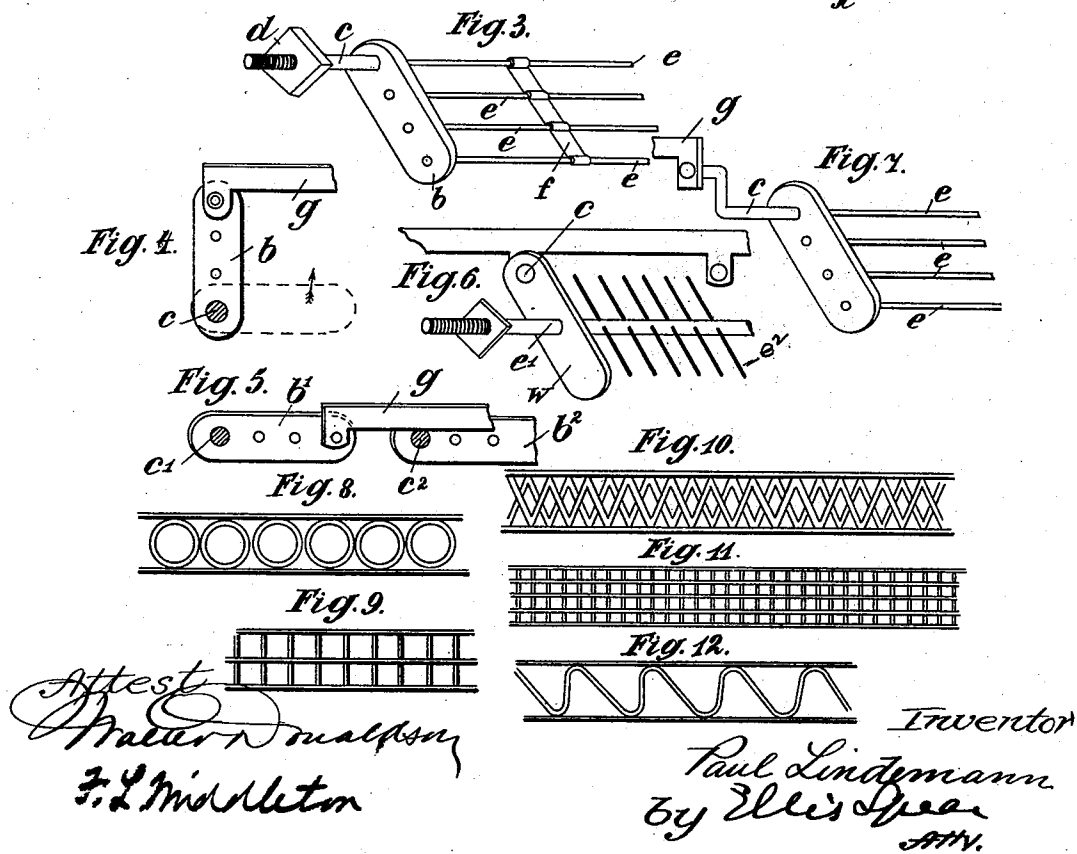
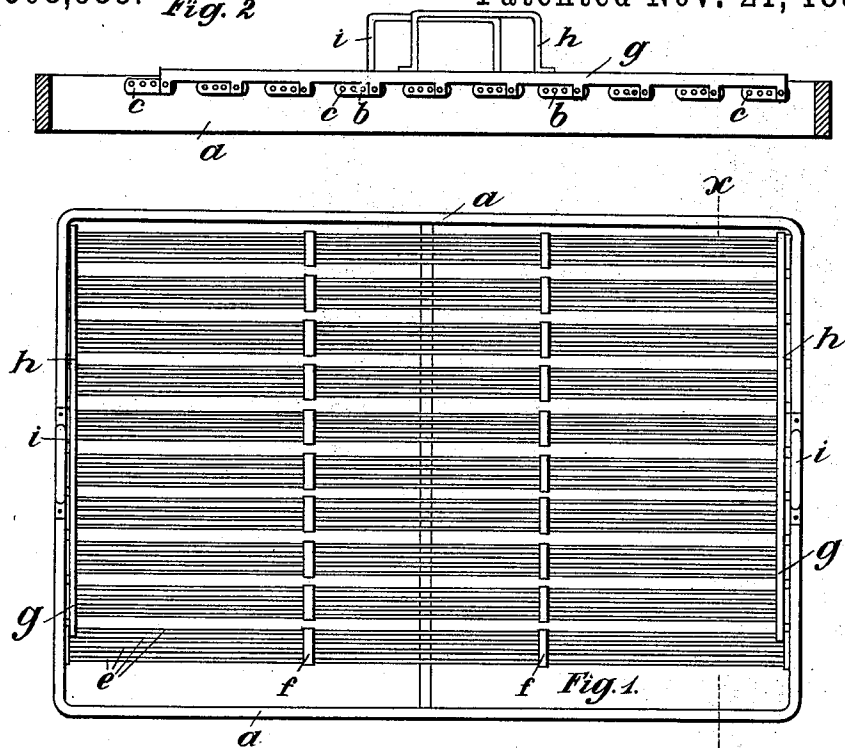
(No Model.)

P. LINDEMANN.

APPARATUS FOR MANUFACTURING SWEETS.

No. 508,955. *Fig. 2*

Patented Nov. 21, 1893.



UNITED STATES PATENT OFFICE.

PAUL LINDEMANN, OF LEIPSIK-GOHLIS, GERMANY.

APPARATUS FOR MANUFACTURING SWEETS.

SPECIFICATION forming part of Letters Patent No. 508,955, dated November 21, 1893.

Application filed May 1, 1893. Serial No. 472,581. (No model.)

To all whom it may concern:

Be it known that I, PAUL LINDEMANN, of 30 Hauptstrasse, Leipsic-Gohlis, in the Kingdom of Saxony and German Empire, have invented new and useful Improvements in Apparatus for Manufacturing Sweets, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to an apparatus employed for the manufacture of sweets which are coated or covered with chocolate or other substance. Such sweets up to the present time have usually been formed by dipping
15 each piece separately into and removing it from the liquid coating or covering substance and then laying it upon a sheet of paper for the covering to dry or become hard. This method was exceedingly tedious and wasted
20 a great amount of time.

The object of the present invention is to effect a saving in time employed in the manufacture of such sweets, and as a consequence to render their production much cheaper.
25 The apparatus by which these ends may be achieved is illustrated by the accompanying drawings reference to which is hereinafter made.

Figure 1 illustrates in plan the general arrangement of the constituent parts of the apparatus. Fig. 2 shows a section of the apparatus taken along the line *xx* Fig. 1. Fig. 2 and all the following figures are drawn to a larger scale than is Fig. 1. Figs. 3 to 12 illustrate different parts of the apparatus with
35 their modifications and the devices by which they can be reversed, in different positions.

As illustrated by the drawings the apparatus consists of a rectangular frame *a*, carrying upon opposite ends a series of arms or cranks *b* pivoted at *c* as shown in Fig. 2. Each of these cranks or arms is connected to the one opposite to it by a series of light wires or rods *e* (Figs. 2, 3, and 7) so that a
40 number of hinged trays are formed extending across the frame of the machine. The pivots *c* are preferably secured in place by small nuts *d*, Fig. 3. The hinged trays may

consist of the parallel straight wires *e* as described, and furnished with distance pieces *f*, 50 or they may be formed of the net work or trellis work illustrated by Figs. 8 to 12 or of equivalent forms. A further modification as illustrated by Fig. 6 consists in substituting for the parallel rods *e* a single rod *e'* carrying 55 transverse pins or rods *e''*.

A rotary motion is imparted to the transverse trays to provide for the displacement of the covered sweets. One method of accomplishing this, as shown in Figs. 2, 4 and 5, is 60 to provide a rod or bar *g* which is attached to one of the parallel rods *e* of each crank *b*. One of the bars *g* may be employed at each side of the apparatus and each will be furnished with a handle *h*. As shown by Figs. 65 4 and 5 the bar *g* limits the movements of the trays to an angle of one hundred and eighty degrees.

In the modification illustrated by Fig. 7 the rods *g* are attached to the shafts *c* outside the 70 frame *a* the shafts being suitably cranked. By this arrangement a complete circular motion may be imparted to the trays.

The sweets which are to be coated with chocolate or other substance are laid in rows 75 upon the lattice or perforated trays. The frame is then lifted by the handles *i* and is dipped horizontally into a vessel containing the coating or covering liquid. If the sweets are only required to be coated on their lower 80 parts they are submerged to the required depth. Should it be necessary to completely coat or cover the sweets a piece of suitable wire netting or lattice work is laid over the top of the frame to prevent the sweets float- 85 ing off the trays when they are submerged. The frame and the trays and the contained sweets are then withdrawn from the bath. It is now necessary to remove the sweets from the trays the frame being laid upon a sheet 90 of paper and the upper netting if used is removed. Rotary motion is imparted to the trays by the rod *g* preferably to the extent of one hundred and eighty degrees, the former lower faces of the trays being now at the top 95 for the reception of a fresh lot of sweets. An

angle of forty-five degrees is however only necessary to effect the displacement of the covered sweets.

What I claim, and desire to secure by Letters Patent of the United States, is—

In combination, the frame, a series of open work trays pivoted in said frame, a bar extending across each end of the frame having a series of projections pivotally connected

with the free edges of the trays and handles connected to said bars for lifting them and tipping the trays, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

PAUL LINDEMANN.

Witnesses:

CARL BORNGRAEBER,
FRIEDH. LINDEMANN.