2 Sheets—Sheet 1.

G. S. COLLUM.

MACHINES FOR MAKING CARAMELS AND OTHER CANDIES.

No. 186,114. Patented Jan. 9, 1877.

Fig. 1.

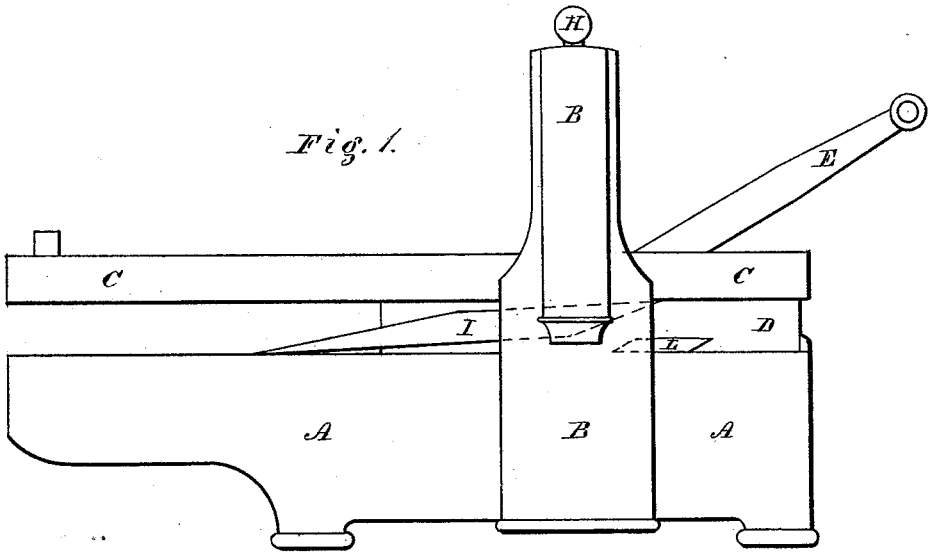
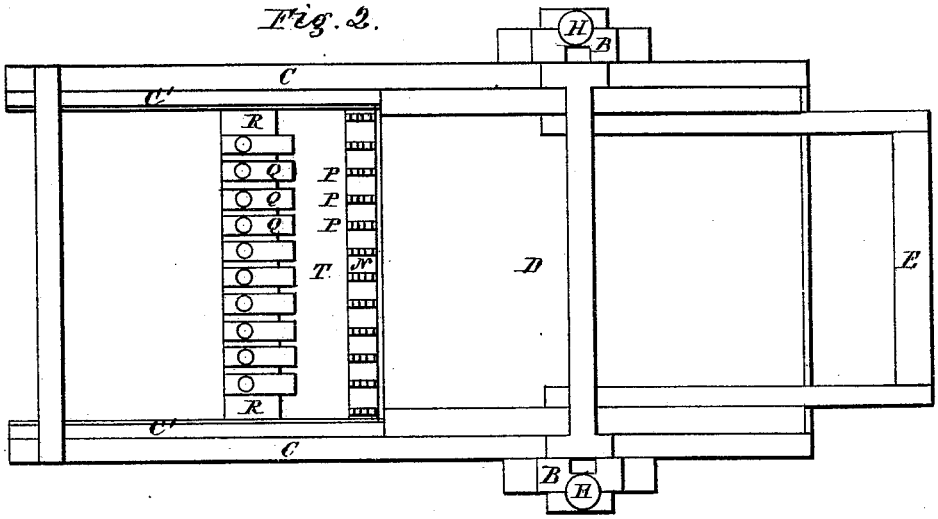


Fig. 2.



Witnesses.

C. B. Richards.

John L. Peters.

Inventor.

George S. Collum.

by Thos. G. Ellis, Attorney

2 Sheets—Sheet 2.

G. S. COLLUM.

MACHINES FOR MAKING CARAMELS AND OTHER CANDIES.

No. 186,114. Patented Jan. 9, 1877.

Fig. 3.

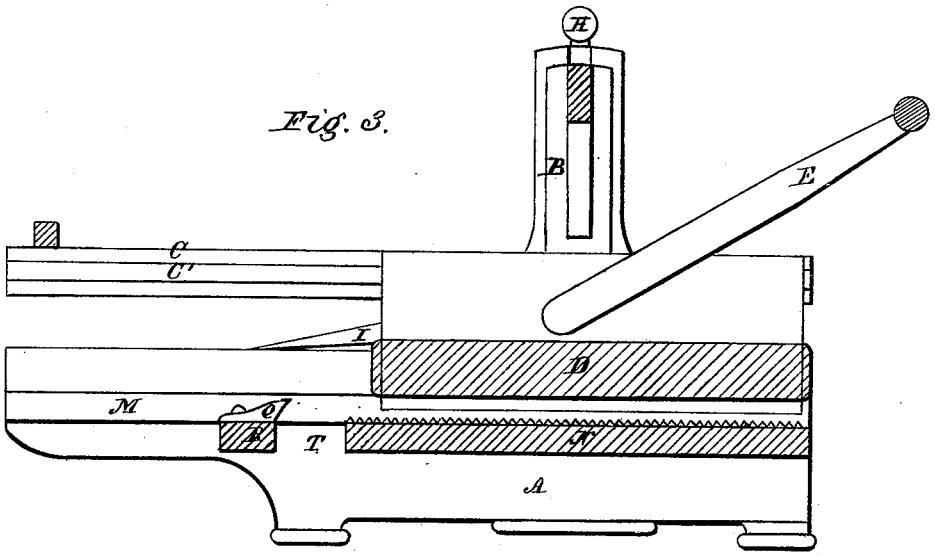
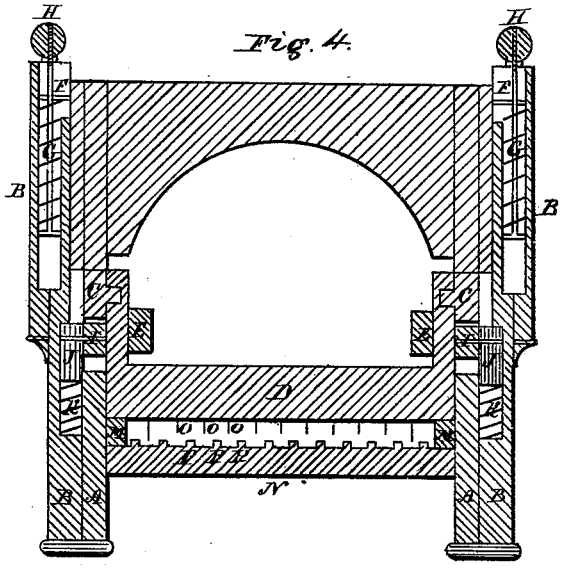


Fig. 4.



Witnesses.

C. B. Richmond.

John T. Peters.

Inventor.

George S. Collum.

by Thos. G. Ellis, Attorney

UNITED STATES PATENT OFFICE.

GEORGE S. COLLUM, OF HARTFORD, CONNECTICUT, ASSIGNOR OF ONE-HALF HIS RIGHT TO WALTER A. BRYANT, OF SAME PLACE.

IMPROVEMENT IN MACHINES FOR MAKING CARAMELS AND OTHER CANDIES.

Specification forming part of Letters Patent No. **186,114**, dated January 9, 1877; application filed August 29, 1876.

To all whom it may concern:

Be it known that I, GEORGE S. COLLUM, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Machines for Making Caramels and Other Candies; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My invention relates to machines for making caramels, chocolate, or other candies in the form of drops; and it has for its object the mechanical formation of these drops by means of the machine instead of giving them their form by hand, as is usual in manufacturing them.

My invention consists in the construction and arrangement of the machine that will be hereinafter described, and in the combination of the several parts to produce the desired result.

In the accompanying drawings, on two sheets, Figure 1 is a side view of my improved machine. Fig. 2 is a top view of the same. Fig. 3 is a vertical longitudinal section through the middle, showing the parts beyond. Fig. 4 is a vertical cross-section through the middle of the standards.

A is the main body or frame of the machine. B B are standards attached to the frame, and extending upward upon each side of the machine. C is a movable frame, which has a vertical motion up and down in guides in the standards B. D is a flat plate for rolling the candies, which is moved back and forth by means of the handle E. This rolling-plate runs on ways or guides C′ upon the sides of the frame C, and moves up and down with it. The frame C where it runs in the grooves in the standards B is provided with projections F, which rest upon springs G, for the purpose of partially supporting the weight of the frame and that of the rolling-plate D, so that the pressure upon the candy can be adjusted to any amount desired. The adjustment is effected by means of the nuts H, which act upon rods supporting the bottom of the springs, in such a manner that the tension of the spring is increased or diminished by turning the nut. I is a rocking bar on each side of the machine, which is pivoted to a slide, J, in the standard, and is supported by the spring K. This bar forms an inclined plane for moving the frame C and the rolling-plate D up and down. The sides of the rolling-plate are furnished with studs or projections L, which pass under the bars I when the rolling-plate is moved in one direction, and over the top of it when moved in the other direction. When the plate is pushed forward from the position shown in Fig. 1, the stud L passes under the bar I, which rises to let it pass; but when it returns it mounts upon the upper side of the bar, and, moving up the inclined plane, raises the frame C and the plate D until the stud L drops over the other end of the bar I to its former position. The spring upon which the bar I rests yields slightly, and eases this motion.

In place of the stud L, a roller can be used, which is preferable in the larger machines to diminish friction.

M M are slides attached to the fixed frame of the machine, upon which the rolling-plate D moves back and forth when in its lowest position. N is the table, upon which the caramels or other candies are rolled. It is attached to the fixed frame of the machine, and remains stationary while the plate D is moved back and forth above it. This table is provided with longitudinal indented raised ridges P P, &c. One of these ridges enters the middle part of the circumference of each caramel, and by means of the friction created by the indentations the caramel is prevented from slipping, and is forced to roll between the plates D and N. O O, &c., are knife-edges, extending downward from the rolling-plate D, to which they are attached longitudinally, in such a manner that they lie midway between the ridges P. These serve to cut apart and separate the caramels as they are rolled. Q Q, &c., are a series of knives or cleaners, arranged upon a cross-bar, R, in such a manner that each one of the cleaners enters one of the channels between two of the knife-edges

O O, and cleans out any substance that may remain, so as to be ready to operate upon new material introduced between the plate D and table N. E is a handle attached to the rolling-plate D, for the purpose of drawing it back and forth. T is an opening, through which the caramels are discharged when finished.

The operation of my improved machine is as follows: The rolling-plate D is pushed back to the rear, and a roll of the material to be operated upon is placed upon the table N, extending across from side to side. The rolling-plate is then drawn forward, which raises it over the inclined slide I, and drops it down onto the bars M. The rolling-plate is then drawn a few times back and forth to roll the caramels or other candies into proper form, when it is again pushed back to the rear. This discharges the finished caramels through the opening T, and cleans out the channels between the knife-edges, ready for a new operation.

What I claim as my invention is—

1. The combination of the rolling-plate D with the movable frame C and the inclined rocking bars I, for giving the proper motion to the plate, substantially as herein described.

2. The combination of the adjustable springs G with the frame C, and rolling-plate D, to regulate the pressure and assist in supporting the weight of the frame, substantially as herein described.

3. The rolling-plate D, having knives O, in combination with the table N, having the indented ridges P, substantially as herein described.

GEO. S. COLLUM.

Witnesses:

THEO. G. ELLIS,

JOHN T. PETERS.