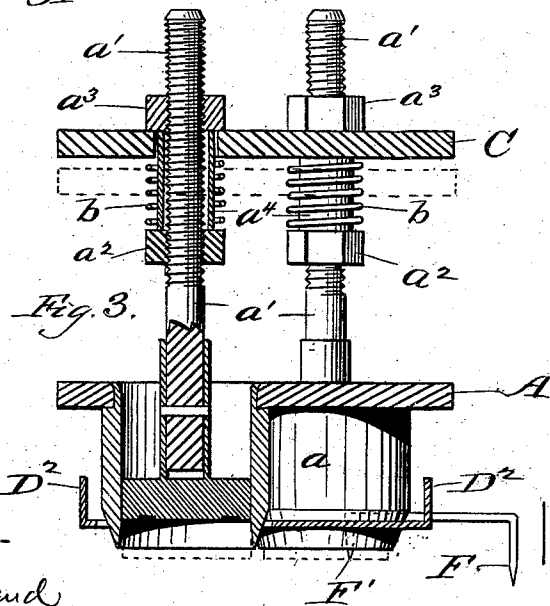
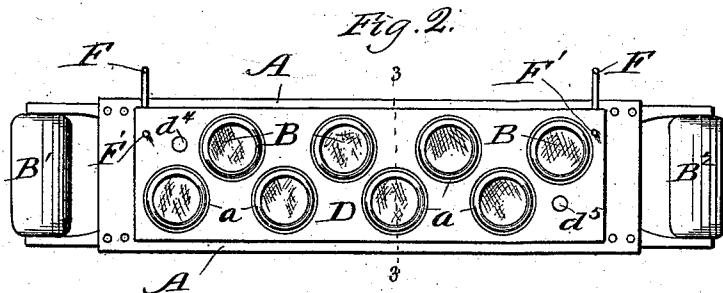
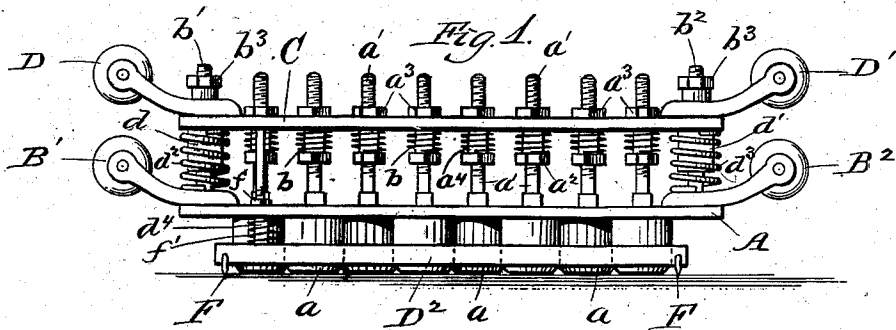


(No Model.)

C. H. HALL.
HAND LOZENGE CUTTER.

No. 268,886.

Patented Dec. 12, 1882.



WITNESSES.

F. B. Townsend
L. M. Freeman.

INVENTOR.

Chas. H. Hall
By L. B. Courland & Co.
attys



UNITED STATES PATENT OFFICE.

CHARLES H. HALL, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
RUFUS P. PATTISON, OF SAME PLACE.

HAND LOZENGE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 268,886, dated December 12, 1882.

Application filed March 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. HALL, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in a Hand Lozenge-Cutter; and I do hereby declare the following to be a full, clear, and exact description of the invention, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings,
10 and to letters of reference marked thereon, forming a part of this specification.

This invention relates to improvements in mechanism for cutting lozenges and other confectionery, the object being to provide a device
15 to be used by hand which is adapted to cut a number of lozenges at one stroke; and it consists of a number of cutters of any desired contour, rigidly secured to a suitable holding-
20 plate provided with operating-handles at each end, a number of pistons provided with stems attached to a second plate, which are adapted to have a vertical movement in said cutters for the purpose of expelling the goods there-
25 from, and springs for automatically returning the second plate to a normal position, as will be hereinafter more fully set forth in detail.

Figure 1 is a side elevation; Fig. 2, a bottom view, and Fig. 3 a transverse section in the plane 3 3, Fig. 2. Fig. 4 is a face view of one of the embossing-pistons.

Referring to the drawings, A represents a stationary plate having a series of cutters, a , rigidly secured thereto. These cutters, as
35 herein shown, are of a cylindrical form, but may be of any desired contour or configuration and of any number—one or more. Each cutter is provided with a piston-plunger, B, fitting closely to the interior walls of the same,
40 and adapted to have a vertical movement therein for the purpose of expelling the cut-out goods. The pistons are provided with the stems a' , inserted in the movable plate C, the upper ends of the stems a' being threaded for
45 the reception of the lower nuts, a^2 , and the upper nuts, a^3 . On the stems a' and between these nuts are placed the sleeves a^4 , around which are coiled the spiral springs b , the upper ends bearing against the under side of the
50 plate C and the lower ends resting on the nuts a^2 , by which means the tension of the springs

is regulated. By means of the upper nuts, a^3 , the normal position of the pistons in the cutters is changed so as to produce a lozenge of any desired thickness, the spiral springs b
55 serving to accommodate the pistons to any unevenness in the sheet of dough. The lower ends or faces of the pistons may be provided with ornamental designs or word-mottoes, which are transferred to the confection in the
60 process of cutting out the same.

The plates A and C are secured in relation to each other by means of the bolts b' b^2 , placed at each end of the same, the upper ends being threaded for the reception of the nuts b^3 , which
65 serve to retain the adjustable sleeves d d' and plate C in place on the bolts b' b^2 . The sleeves d d' are enlarged below the plate C, forming a shoulder-bearing against the under side of the same, while the upper end or neck of the
70 sleeves bears against the nuts b^3 , by means of which the normal position of the plate C may be changed. The lower ends of the sleeves come down within a short distance of the upper side of the plate A, and when the operator
75 presses down on the handles D D' the upper plate and attached parts are forced downward until the lower ends come in contact with the plate A, by which the length of the downward stroke is regulated. The spiral springs d^2 d^3 ,
80 coiled around the sleeves d d' , serve to return the upper plate, C, to its normal position on the completion of the stroke.

The clearing-plate D² incloses the lower end of the cutters and prevents the scrap from
85 adhering to the same. This clearing-plate is secured in place by means of the rods d^4 d^5 , which pass through both plates A and C. These rods are threaded at a point immediately above the plate A, and are provided with the
90 nuts f , whereby the lowest position of the clearing-plate is regulated, while it is free to move in an upward direction until the same comes in contact with the under side of the cutter-plate A. That part of the rods d^4 d^5
95 between the cutter and clearing-plate is provided with the spiral springs f' , which return the clearing-plate to its lowest or normal position. The clearing-plate is provided at each end with the gage-points F F', which enable
100 the operator to readily see what distance to move the cutter for the next stroke. The op-

erator holds the cutter with the projecting gage-points F toward him, the gage-points F' leaving an imprint in the dough, and as the cutter is advanced for another stroke the gage-points F are inserted in the marks left by the preceding gage F'. The lozenges are cut out by pressing down on the lower handles, B' B², attached to the plate A; then, before the device is raised out of the sheet of dough, the operator presses down on the upper handles attached to the plate C, which brings the ornamenting face of the pistons in contact with the cut-out goods, and transfers thereto the embossing design or print on the face of the pistons. The hands of the operator are then removed from the upper handles and the cutter raised out of the dough and held over a receiving-tray, and the goods expelled from the series of cutters by pressing down with the thumbs on the upper handles, the fingers of the operator being underneath the lower handles, attached to the plate A.

A device holding any number of cutters may be employed, and, if too heavy to be held in the hand, it may be supported on a suitable frame and operated by a hand-lever.

This device is not applicable for cutting lozenges alone, but may be used for all kinds of confections or anything of a similar nature required to be produced in the same way.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a hand lozenge-cutter, the combination, with the plate A, provided with the handles B' B², of the series of cutters *a*, the pistons B, having the stems *a'*, and the plate C, provided with the handles D' D', substantially as described.

2. The combination, with the cutter and clearing-plate D², of the gage-points F F', substantially as and for the purpose set forth.

3. The combination, with the cutter-plate A and the series of cutters *a*, of the clearing-plate D², the gage-points F F', the rods *d'* *d*², adjusting-nuts *f*, and the springs *f'*, substantially as and for the purpose set forth.

4. A hand lozenge-cutter consisting essentially of the plates A and C, having suitable operating-handles, of the series of cutters *a*, the embossing and expelling pistons B, provided with the stems *a'*, the adjusting-nuts *a*² *a*³, the springs *b*, the connecting-bolts *b'* *b*², and the springs *d*² *d*³, constructed, arranged, and operating substantially as and for the purpose set forth.

CHARLES H. HALL.

Witnesses:

L. M. FREEMAN,
CHAS. F. JONES.