M. E. CARD. CUTTING MACHINE.

(Application filed July 8, 1897.)

2 Sheets—Sheet I. (No Model.) WITNESSES

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United States Patent Office.

MILTON E. CARD, OF CAZENOVIA, NEW YORK.

CUTTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 616,823, dated December 27, 1898.

Application filed July 8, 1897. Serial No. 643,848. (No model.)

To all whom it may concern:

Be it known that I, MILTON E. CARD, of Cazenovia, in the county of Madison, in the State of New York, have invented new and useful Improvements in Cutting-Machines, of which the following, taken in connection with the accompanying drawings, is a full,

clear, and exact description.

My invention relates to improvements in cutting-machines, particularly applicable for shaving bones or other materials, and has for its object the production of a device which is simple in construction and particularly effective in operation; and to this end the invention consists in the combination, construction, and arrangement of the parts of a cutting-machine, as hereinafter fully described, and pointed out in the claims.

In describing this invention reference is had to the accompanying drawings, forming part of this specification, in which like letters indicate corresponding parts in all the views.

Figures 1 and 2 are respectively top plan and side elevation of my improved cutting-machine. Figs. 3 and 4 are enlarged vertical and transverse sections taken, respectively,

on lines 3 3, Fig. 1, and 4 4, Fig. 3.

My improved cutting-machine is designed for use in the preparation of poultry-food, 30 and particularly for shaving green bones, &c.; and it consists, essentially, of a supportingframe A, provided with a receiving-chamber a, a cutter B, and a plunger C. The frame A is of any desirable form, size, and construc-35 tion and is usually composed of the receiving-chamber α , a substantially horizontal table a', arranged beneath the receiving-chamber α , and substantially upright legs or standards a^2 . The receiving-chamber a is preferto ably disposed in a horizontal plane, is formed substantially tubular, is provided with an open end a^3 , and is generally removably secured to the table a'.

The cutter B is arranged in advance of the open end a^3 of the receiving-chamber a, and in proximity to said open end is supported by an arm b, suitably secured to the chamber a, and preferably consists of a head b' and

knives \bar{b}^2 .

The face b^3 of the cutter-head b' adjacent | as described, the rod or stem c' may be reto the receiving-chamber a is substantially | ciprocated freely through its journal-bearing flat and is arranged at substantially right | a^5 , and as soon as the handpiece c^7 is relieved

angles with the axis of the cutter-head. The opposite face of the cutter-head is provided with a projecting spindle b^4 , which is jour- 55 naled in a suitable bearing provided at the central portion of the arm b and supports a hand-wheel b^5 or other power-transmitting device.

The follower C is movable within the re- 60 ceiving-chamber a toward and away from the cutter B. The periphery of said follower is usually formed with grooves c, which receive lengthwise ribs or shoulders a^4 , projecting from the inner face of the chamber a. The 65 means for moving the follower C preferably consists of a reciprocating threaded rod or stem c' and a non-revoluble nut c^2 . One end of the rod or stem c' is engaged with the follower C in any desirable manner, and its op- 70 posite end is provided with a suitable handpiece c^3 and is guided in a journal-bearing a^5 , which is usually arranged adjacent to the chamber a in alinement therewith and is preferably formed integral with said chamber. 75 The journal-bearing a^5 is generally provided with a socket a^6 , which preferably extends laterally from opposite sides of the opening of the journal-bearing and is formed of greater diameter than said opening. One end of the 80 socket a^6 is closed and its opposite end extends through the upper face of said bearing.

The non-revoluble nut c^2 is reciprocally movable in the socket a^6 , and is formed with an elongated opening c^4 in its central portion, 85 having its lower side threaded for engaging the threads of the rod or stem c'. A suitable spring c^5 is arranged within the closed end of the socket a^6 for normally forcing the nonrevoluble nut c^2 crosswise of the rod or stem 90 c' into its operative position with its threads engaged with the rod or stem c', and an adjuster c^6 is supported by the frame A for regulating the tension of the spring c^5 . The upper end of the non-revoluble nut c^2 generally 95 extends beyond the socket a⁶ and is provided with a handpiece c^7 , which may be depressed for reversely moving said nut crosswise of the rod or stem c' and disengaging the threads of the non-revoluble nut c^2 from the rod or 100 stem c'. When said hand piece c^7 is depressed, as described, the rod or stem c' may be reciprocated freely through its journal-bearing

from pressure the spring c^5 engages the non-revoluble nut c^2 with the rod or stem c'.

In the use of my invention the non-revoluble nut c^2 is disengaged from the rod or stem c' and the plunger C is withdrawn from the cutter B for permitting the entrance of the bone or other article to be shaved or cut within the chamber a. The plunger C may then be moved toward the cutter B for forcing the bone or other article against said cutter.

The construction and operation of my improved cutting-machine will now be readily understood upon reference to the foregoing description and the accompanying drawings, and as the detail construction and arrangement of the parts of said cutting-machine may be more or less varied without departing from the spirit of my invention I do not herein limit myself to such exact detail construction and arrangement.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. The combination of a frame provided with a receiving-chamber having one end open, and a journal-bearing having a socket extending laterally from the opening in said bearing, a rotary cutter supported by the frame adjacent to the open end of the receiving-chamber, a plunger movable within the receiving-chamber toward and away from the cutter, a threaded rod or stem revoluble in the journal-bearing for actuating the plunger, and a non-revoluble nut reciprocally movable in the socket and having a threaded face movable into and out of engagement with the threaded rod or stem, substantially as and for purpose described.

2. The combination of a frame provided with a receiving-chamber having one end open, a journal-bearing having a socket extending laterally from the opening in said bearing, a rotary cutter supported by the frame adjacent to the open end of the receiving-chamber, a plunger movable within the receiving-chamber toward and away from the cutter, a threaded rod or stem revoluble in the journal-bearing for actuating the plunger, a non-revoluble nut reciprocally movable in the socket and having a threaded face movable into and out of engagement with the threaded rod or stem, and a spring arranged

movable into and out of engagement with the threaded rod or stem, and a spring arranged in the socket for forcing the non-revoluble nut into its operative position, substantially as and for the purpose specified.

3. The combination of a frame provided

with a receiving-chamber having one end open, a journal-bearing having a socket extending laterally from opposite portions of the opening in said bearing and formed of 60 greater diameter than said opening, a rotary cutter supported by the frame adjacent to the open end of the receiving-chamber, a plunger movable within the receiving-chamber toward and away from the cutter, a threaded rod or 65 stem revoluble in the journal-bearing for actuating the plunger, and a non-revoluble nut reciprocally removable in the socket and formed with an elongated opening for receiving the threaded rod or stem, one face of 70 said elongated opening being provided with threads movable into and out of engagement with said rod or stem as the nut is reciprocated in said socket, substantially as and for the purpose set forth.

4. The combination of a frame A provided with a receiving - chamber a having one end open and a journal-bearing a^5 formed integral with the receiving-chamber and having a socket a^6 extending laterally from opposite 80 portions of the opening in the journal-bearing, said socket a^6 being formed of greater diameter than said opening and having one end extended through the outer face of the journal-bearing, a rotary cutter supported by 85 the frame adjacent to the open end of the receiving-chamber, a plunger movable within the receiving-chamber toward and away from the cutter, a threaded rod or stem revoluble in the journal-bearing a^7 for actuating the 90 plunger, a non-revoluble nut c^2 reciprocally movable in the socket a^6 and having one end provided with a handpiece c^7 and its central portion formed with an elongated opening c^4 for receiving the threaded rod or spindle, one 95 face of said elongated opening being provided with threads movable into and out of engagement with said rod or spindle, and a spring c^5 arranged within the inner end of the socket a^6 for forcing the non-revoluble nut into its 100 operative position, substantially as and for the purpose described.

In testimony whereof I have hereunto signed my name, in the presence of two attesting witnesses, at Cazenovia, in the county of Madison, in the State of New York, this 2d day of June, 1897.

MILTON E. CARD.

Witnesses:

PILSBURY A. WEBSTER, MICHAEL H. KILEY.