

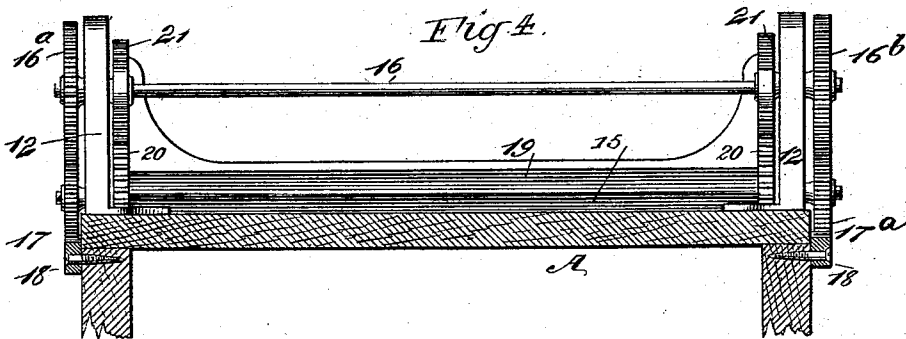
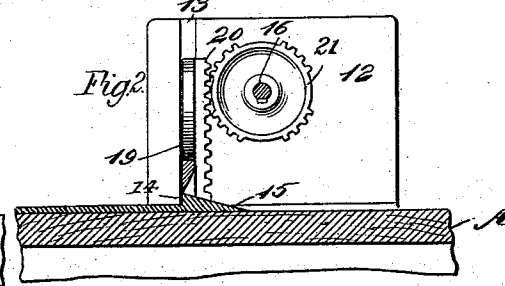
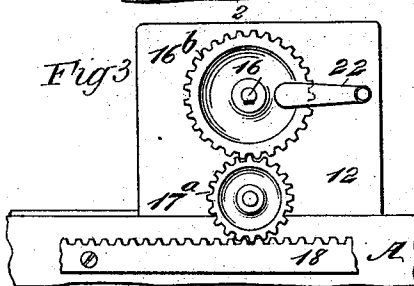
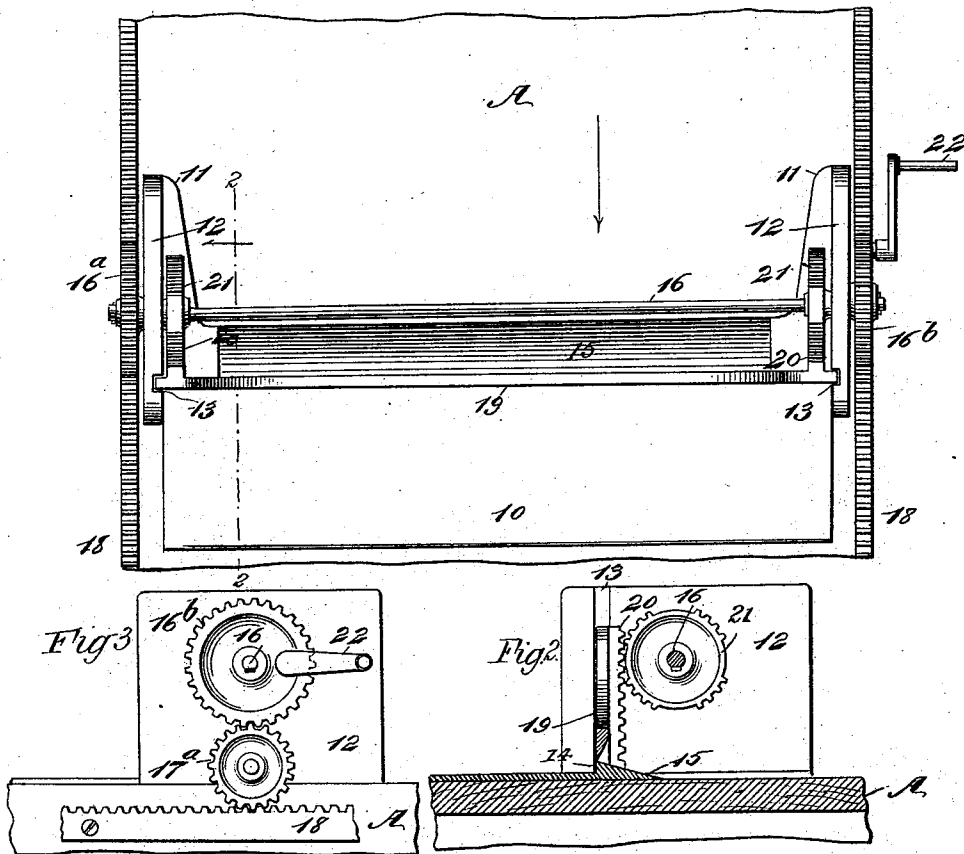
(No Model.)

J. M. ALLARDYCE.
MACHINE FOR CUTTING STICK CANDY.

No. 531,084.

Patented Dec. 18, 1894.

Fig 1.



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JOHN M. ALLARDYCE, OF GALVESTON, TEXAS.

MACHINE FOR CUTTING STICK-CANDY.

SPECIFICATION forming part of Letters Patent No. 531,084, dated December 18, 1894.

Application filed February 7, 1894. Serial No. 499,331. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. ALLARDYCE, of Galveston, in the county of Galveston and State of Texas, have invented certain new and useful Improvements in Machines for Cutting Stick-Candy, of which the following is a full, clear, and exact description.

My invention relates to a machine for cutting stick candy, and it has for its object to provide a machine of exceedingly simple and durable construction, capable of traveling over a table or other support upon which stick candy in given lengths may be laid, and to so travel over the table that the lengthy sticks of candy will be made to slide over the bed of the machine, under a knife or its equivalent; and a further object of the invention is to provide a means whereby the knife may be manipulated at predetermined points in the travel of the machine to cut the lengthy sticks into shorter predetermined lengths.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the machine and a partial plan view of the table upon which it travels. Fig. 2 is a vertical section through a portion of the table and through the machine, the section being taken transversely through the machine upon the line 2—2 of Fig. 1. Fig. 3 is an end view of the machine, and a partial side elevation of the table; and Fig. 4 is a front elevation of the machine and a transverse section through the table.

The frame of the machine consists of a bed 10, provided with lateral projections or arms 11 extending in a forwardly direction one from each end, as shown in Fig. 1. Each arm 11 is provided with a standard 12, either attached thereto or formed integrally therewith, and in the inner face of each standard, preferably near the rear end thereof, a vertical groove 13, is produced. Ordinarily the standards 12 do not extend across the ends of the bed proper in order that the machine may be as light as possible.

The bed is provided with a beveled forward edge 15 and back of said beveled edge the bed is dropped suddenly downward or reduced in thickness forming thereby a longitudinal rib 14 in alignment with the two grooves 13 in the standards of the frame. A drive shaft 16, is mounted to turn in the standards 12 forward of the grooves 13, and the said shaft extends through and beyond the outer faces of the standards, being provided at each outer end with a gear, one gear being designated as 16^a and the other as 16^b, and the said gears 16^a and 16^b, are made to mesh with pinions 17 and 17^a, mounted to turn upon the lower outer portions of the standards, the said pinions being adapted to travel in racks 18, which may be secured to the side faces of the table A over which the machine is to travel.

A cutter 19, preferably in the shape of a knife, is held to slide at its ends in the grooves 13 of the standards; and near each end surface of the cutter upon the forward face thereof, a vertical series of teeth, or a rack 20, is located, and the racks are adapted to be engaged by mutilated gears 21, which are secured upon the drive shaft 16, as shown in Figs. 2 and 4. When the shaft 16, is revolved and the teeth of the mutilated gears engage with the racks 20 of the cutter, the cutter will be elevated; and when the following plain surfaces of the mutilated gears face the racks of the cutter, the latter, having no support, will drop of its own weight downward until its lower edge, which is preferably more or less sharpened as shown in Fig. 2, strikes the elevated portion 15 of the bed or the stick candy extending over said surface. One of the outer gears of the drive shaft, the gear 16^b, for example, is provided with a crank arm 22, as shown in Figs. 1 and 3, whereby said gear may be turned and through it the shaft 16.

In the operation of cutting the candy, the candy is made in stick form and in predetermined lengths. Ordinarily the length of the stick is such as to extend practically from one end of the table A to the other. These long sticks are placed in rows at predetermined distances apart. The machine is then placed in engagement with the racks 18, being located at one end of the table, and the ends of the long sticks are lifted up until they en-

gage with the beveled forward edge 15 of the bed of the machine. By manipulating the crank arm 22 the pinion 17^a will be revolved, and the machine will travel along the table in direction of its opposite end, and at the same time the drive shaft 16, will be revolved, and the mutilated gears will act to automatically elevate the cutter and permit it to drop. Each time the cutter drops, all the sticks in a series will be chopped off, or smoothly broken off, at the elevated surface 15 of the bed, and according to the grouping of the teeth upon the mutilated gears 21 will be the length of the cut sticks. The cut sticks of candy fall upon the bed back of the surface 15, and the machine may therefore be moved forward without hinderance.

If the racks 18 are located over the top of the table upon which the machine is to travel, the standards 12 will be placed in guided connection with the racks so as to prevent the machine from moving endwise. When, however, the racks are placed at the sides of the table, as shown in Fig. 4, by dropping them below the upper edge the side surfaces of the table will act as end guides for the machine.

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

1. In a candy cutting machine, the combination of a traveling bed, means for operating the bed, a reciprocating cutter mounted in the bed, and mechanism controlled by the bed operating mechanism for raising the cutter and allowing it to drop, substantially as described.

2. In a machine for cutting candy in lengths, and for analogous purposes, a bed having a raised surface thereon, a cutter carried by the bed, said cutter having timed movement to

and from the raised surface of the bed, and means for driving the cutter, substantially as shown and described.

3. In a machine for cutting candy and for analogous purposes, a traveling bed, a drive shaft carried by the bed, pinions actuated from the drive shaft and adapted to engage with racks, and a reciprocating cutter actuated by the drive shaft and having timed approach to the bed, as and for the purpose set forth.

4. The combination, with a bed, standards projected therefrom, a drive shaft carried by the standards, driving gears carried by the shaft, and pinions actuated from said gears, adapted to engage with stationary racks, of a cutter having vertical movement over the bed and provided with racks upon one of its faces, and mutilated gears carried by the drive shaft and adapted for engagement with the racks of the cutter, as and for the purpose set forth.

5. The combination, with stationary racks, a bed located between the racks, having a beveled forward surface and a raised surface back of said beveled surface, and a drive shaft supported in bearings connected with the bed, of gears carried by the shaft, pinions meshing with the racks and with said gears, a knife capable of sliding movement above the bed and adapted for engagement with its raised surface, racks located upon the knife, and mutilated gears carried by the drive shaft and adapted for engagement with the racks of the knife, whereby the latter is raised and then allowed to drop, substantially as and for the purpose set forth.

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