No. 681,266. Patented Aug. 27, 1901.

R. ROOP.

MEAT TENDERER.

(Application filed Apr. 17, 1901.)

(No Model.)

Fig. 1.

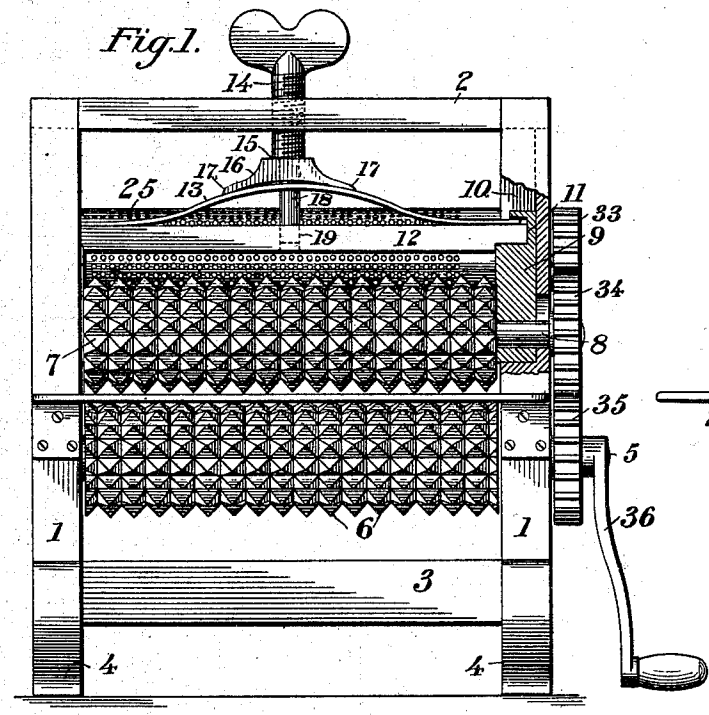


Fig. 2.

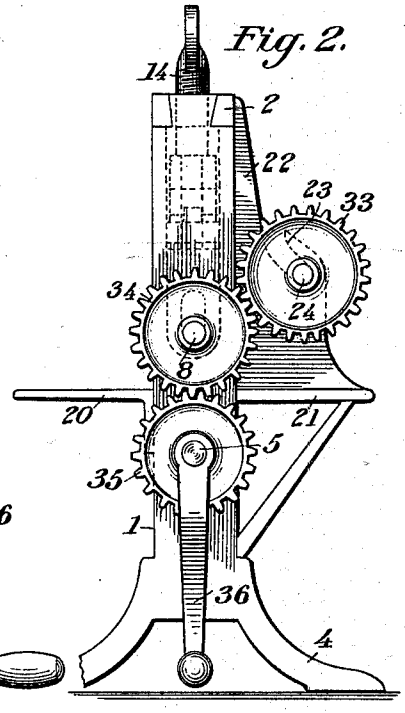


Fig. 3.

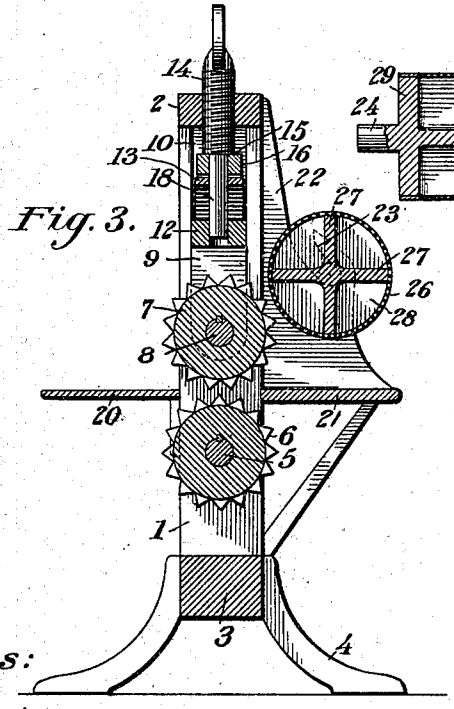


Fig. 4.

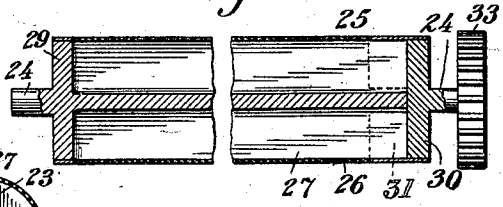
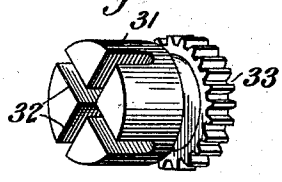


Fig. 5.



Witnesses:

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MEAT-TENDERER.

SPECIFICATION forming part of Letters Patent No. 681,266, dated August 27, 1901.

Application filed April 17, 1901. Serial No. 56,260. (No model.)

To all whom it may concern:

Be it known that I, ROSANA ROOP, a citizen of the United States, residing at Montgomery, in the county of Fayette and State of West Virginia, have invented a certain new and useful Meat-Tenderer, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to meat-tenderers; and the principal object of the present invention is to provide a machine for rendering meat tender, and at the same time distributing any desired condiments upon the meat preparatory to cooking the same. In connection with the tendering-rolls I employ a detachably-mounted condiment-holder, preferably in the form of a cylinder, which when in position is geared to one of the tendering-rolls, so that rotary motion is simultaneously imparted to the condiment-holder during the operation of the toothed rolls which effect a crushing of the meat.

It is also an object of the present invention to employ, in connection with a movable toothed roll, novel means for exerting a yielding pressure thereon, combined with a regulating device whereby the degree of pressure of the movable roll may be increased or diminished according to necessity.

With the above and other objects in view, the nature of which will appear more fully as the description proceeds, the invention consists in the novel construction, combination, and arrangement of parts hereinafter fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a front elevation of a meat-tenderer embodying the present invention. Fig. 2 is a side elevation of the same. Fig. 3 is a central vertical cross-section through the machine. Fig. 4 is a longitudinal section through the condiment-holder. Fig. 5 is a detail perspective view of the driving-head of the condiment-holder.

Like numerals of reference designate like parts in all figures of the drawings.

The meat-tenderer contemplated in this invention comprises, essentially, a suitable frame, preferably composed of the oppositely-located posts or standards 1, connected at top and bottom by upper and lower cross-bars 2 and 3, respectively, and also provided with supporting legs or feet 4. Journaled upon a shaft 5, mounted in bearings in the posts or standards 1 is a toothed roll 6, the same being mounted in stationary bearings, so as to be incapable of vertical movement. Located above the stationary toothed roll 6 is a vertically-movable roll 7, having teeth similar to those on the lower roll and mounted upon a shaft 8, which is journaled in vertically-movable slide-boxes 9, mounted to move freely up and down in grooves or ways 10 in the inner adjacent sides of the posts or standards 1, as clearly illustrated in Figs. 1 and 3.

The slide-boxes 9 are provided adjacent to their upper ends with recesses 11, in which are received the opposite ends of a presser-bar 12, the said recesses 11 being also sufficiently large to receive the opposite extremities of a tension-spring 13 of bow shape, the ends of the spring resting upon the presser-bar and being adapted to slide thereon and within the recesses 11 in the slide-boxes 9, as clearly illustrated in Fig. 1. 14 designates a tension-regulating screw, which passes through a threaded opening in the upper cross-bar 2 and is provided with a shoulder 15, which rests against a block or seat 16, having oppositely-extending feet 17, which bear against the upper side of the tension-spring 13. The screw 14 is further provided with a reduced and smooth shank 18, which passes through openings in the block 16 and spring 13 and enters an opening 19 in the presser-bar 12. In this way the screw 14 has a bearing at two points in its length—viz., in cross-bar 2 and in the presser-bar 12. By turning the screw 14 downward the block 16 is forced downward and greater tension brought on the spring 13, and consequently greater pressure on the presser-bar 12. By turning the screw 14 in the opposite direction the pressure on the bar 12 is relieved. In this way any desired pressure may be imparted to the upper movable roll 7 for producing the requisite tendering action on the meat as it is passed between the rolls 6 and 7 and subjected to the action of the teeth thereon. In order to assist the operator in passing the meat between the rolls, I provide oppositely-located tables or leaves 20 and 21, located, respectively, at the front and rear of the machine, the said tables or leaves forming a sup-

port for the meat as it is moved back and forth between the tendering-rolls.

The machine is provided at one side with the oppositely-located brackets 22; provided with inclined slots 23 for the reception of the journals 24 of a condiment-holder 25, which is preferably in the form of a cylinder, comprising an outer perforated or reticulated wall 26. The interior of the condiment-holder is divided into a series of compartments by means of cross-webs or partitions 27, extending from end to end and providing separate compartments 28 for the reception of salt, pepper, and other condiments of different character, which as the condiment-holder is rotated are sprinkled and distributed on the meat simultaneously with its passage between the tendering-rolls. One end of the condiment-holder is closed by a fixed head 29, while the opposite end is normally closed by a removable driving-head 30, the same being provided with an inwardly extending portion 31, having slots or grooves 32 to receive the ends of the webs or partitions 27, thus preventing the escape of the condiments and also serving to provide an interlocked engagement between the driving-head and condiment-holder, so that the rotary movement of the driving-head 30 will impart corresponding movement to the condiment-holder. One of the journal portions 24 is carried by the detachable driving-head 30 and also has fast thereon a spur gear-wheel 33, which when the condiment-holder is in position meshes with a spur gear-wheel 34 on the shaft of the upper toothed roll 7, the said wheel 34 being in turn driven by a similar wheel 35, mounted on the shaft of the lower roll 6, to which rotary motion is imparted by means of an operating-crank 36.

From the foregoing description it will be seen that by operating the crank 36 rotary motion will be imparted to the toothed rolls, which will simultaneously act on the meat and on opposite sides thereof as it passes between the rolls. It will also be seen that the pressure exerted by the upper roll on the meat may be regulated by means of the tension-screw 14; further, that at any time during the operation of the tenderer the condiment-roll may be placed in position on the machine, whereupon and upon the further operation of the machine salt, pepper, and other condiments contained in the holder 25 will be sifted and distributed upon the meat as it is moved back and forth between the tendering-rolls. To replenish the supply of material in the condiment-holder, the driving-head 30 may be detached. In replacing the head 30 the slotted portion thereof interlocks with the webs or partitions 27, thereby causing a simultaneous rotation of the driving-head and body of the condiment-holder.

I do not desire to be limited to the details of construction hereinabove set forth and accordingly reserve the right to change, modify, or vary the construction within the scope of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination with a meat-tenderer embodying tendering-rolls, of a rotatable condiment-holder having provision whereby it is operated simultaneously with the operation of the tenderer.

2. The combination with a meat-tenderer embodying toothed rolls, of a rotatable condiment-holder geared to one of the rolls for simultaneous operation therewith.

3. The combination with a meat-tenderer embodying rotatable tendering-rolls, of a condiment-holder geared to one of the rolls for simultaneous operation therewith and comprising a plurality of separate condiment-compartments.

4. The combination with a meat-tenderer embodying tendering-rolls, of a detachably-mounted rotatable condiment-holder adapted to be actuated simultaneously with the machine.

5. The combination with a meat-tenderer embodying tendering-rolls, of a detachably-mounted rotary condiment-holder geared to the machine for simultaneous operation therewith, the said condiment-holder comprising a detachable driving-head.

6. The combination with a meat-tenderer comprising geared tendering-rolls, of a detachably-mounted condiment-holder, and a driving-head having an interlocked engagement with one end of the condiment-holder and provided with means whereby it may be placed in gear with one of the tendering-rolls.

7. The combination with a meat-tenderer embodying tendering-rolls, of a rotary condiment-holder detachably mounted thereon and comprising an internal web or partition dividing the holder into separate compartments, and a grooved driving-head adapted to interlock with the condiment-holder and to be driven by the machine simultaneously with the operation of the meat-tendering mechanism.

In testimony whereof I affix my signature in presence of two witnesses.

ROSANA ROOP.

Witnesses:
B. H. EARLY,
B. W. MOORE.