## R. STONE. MEAT TENDERER.

(Application filed May 20, 1901.)

(No Model.)

## United States Patent Office.

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## MEAT-TENDERER.

SPECIFICATION forming part of Letters Patent No. 698,074, dated April 22, 1902.

Application filed May 20, 1901. Serial No. 61,140. (No model.)

To all whom it may concern:

Be it known that I, RUDOLPH STONE, a citizen of the United States, residing at Catawba, in the county of Price and State of Wisconsin, have invented a new and useful Meat-Tenderer, of which the following is a specification.

This invention relates to meat-tenderers, and has for its object to provide an improved device of this character which is especially designed for domestic purposes and is constructed for convenience in operation and cleansing, so as to provide a sanitary device. It is furthermore designed to provide improved means for mounting one of the mangling members, so as to accommodate the device to pieces of meat of different thicknesses.

with these and other ends in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective yiew of a meat-tenderer embodying the present invention. Fig. 2 is a central longitudinal sectional view thereof. Fig. 3 is a transverse sectional view taken on the line 3 3 of Fig. 2.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

In carrying out the invention there is provided a body or supporting-frame, which is oblong in shape and has its opposite longitudinal sides 1 projected above the opposite end pieces 2, as plainly indicated in Fig. 2 of the drawings. At each lower corner of the frame there is provided an outwardly-offset foot 3, which is perforated for the reception of a suitable fastening 4, whereby the frame may be securely fastened to a support—as, for instance, a table. Each upper longitudinal side of the frame is provided with an inswardly-directed horizontal flange 5, which is flush with the upper edge of the side and ex-

tends from end to end thereof, the intermediate portion of the flange being broken away to permit of the mounting of the antifrictionrollers 6, the opposite journals of which are 55 rotatably mounted in bearing sockets or seats 7, formed in the inner faces of the respective longitudinal sides of the frame. At the inner end of each journal portion there is provided an enlarged collar or flange 8, the outer 60 marginal edge of which is designed for the slidable support of a reciprocatory plate or platform 9. The reciprocatory platform is designed for the support of the meat and is provided with opposite longitudinal pendent 65 flanges 10, which are grooved longitudinally upon their outer sides for the slidable reception of the respective longitudinal flanges of the frame, as best shown in Fig. 3 of the drawings, the bottom edges of the grooved 70 flanges being supported upon the marginal flanges of the antifriction-rollers, so as to insure an easy movement of the platform. Adjacent to one end of the platform there is provided a pendent stop shoulder or projec- 75 tion 11, which is of a length to clear the adjacent roller and is designed to strike against the intermediate portion of a cross-bar 12, connecting the middle portions of the opposite sides of the frame and lying between 80 the rollers, whereby the platform is limited in its movement in one direction. To limit the movement of the platform in the opposite direction, the opposite end of the same is provided with an adjustable stop, con-85 sisting of a pendent projection 13, which lies entirely above the plane of the upper edge of the cross-bar, so as to clear the same, and a pendent stop-pin 14, having a lateral pivot projection 15 at its upper end and ro- 90 tatably mounted in a corresponding perforation formed in the projection 13 and disposed longitudinally of the platform. The lower end portion of the stop-pin projects below the cross-bar, so as to contact therewith and 95 limit the movement of the platform, and at the same time by tilting the device laterally the adjustable stop-pin may be swung laterally so as to clear the cross-bar, thereby to permit of the application and removal of the 100 platform. It will of course be understood that the opposite ends of the frame lie below

the opposite stops, so as not to interfere with the reciprocatory movement of the platform. As best shown in Fig. 3, it will be seen that the opposite end portions of the intermediate 5 cross-bar 12 lie below the opposite flanges of the platform, so as to clear the same, while the intermediate portion of the cross-bar is convexed or enlarged vertically, so as to lie above the intermediate portions of the roll-10 ers and in the paths of the opposite stop projections upon the platform. Moreover, the rollers are reduced intermediately, so that the portions S may support the platform and the stop projections may pass the intermedi-15 ate roller portions. It will be understood that the platform is practically supported upon the rollers, the slidably-engaged flanges merely forming guides to prevent lateral dis-

placement of the platform, whereby the latter 20 is provided with roller-bearings. The intermediate portion of the upper face of the platform is provided with a plurality of transverse pointed ribs or teeth, as indicated at 16, while the opposite terminals of the plat-

25 form are smooth and unchanged.

For the manipulation of the device there is provided a segmental toothed gear or mangling member 17, in mesh with the toothed portion of the platform and mounted upon the 30 upper end of a standard 18, rising from the middle of the back of the frame. The segmental gear has a lateral bearing-sleeve 19, provided with an inwardly-tapered bore for the reception of a correspondingly-tapered 35 bearingstud or projection 20, projected laterally from the upper end of the standard 18 and lying across the platform. The bearing pin or projection is provided with a longitudinal bore, which is reduced adjacent to the outer 40 end thereof to form an innermarginal shoulder 21, and through this bore there is projected a bolt 22, which is capable of an endwise elastically-yieldable movement by reason of a coiled spring 23, embracing the bolt 45 and bearing in opposite directions against

the head thereof and the marginal shoulder within the bore of the bearing-stud. It will be understood that the enlarged portion of the bore of the stud is large enough to slid-50 ably receive the head of the bolt. The opposite screw-threaded end of the bolt is provided with a nut 24 to hold the bearing-sleeve upon the bearing-stud. A suitable operatinghandle 25 rises from the segmental gear, 55 whereby the latter may be conveniently rocked upon its pivotal support.

In using the device the handle is thrown to one limit and the meat placed upon the platform, after which the handle is moved back 60 and forth, thereby mashing the meat between

the platform and the segmental gear.

The purpose of the elastically-yieldable fastening-bolt 22 is to permit of the segmental gear tilting laterally, so as to automatically 65 accommodate for thick portions of the meat, gristle, or bone which may lie beneath one

side of the gear, and thereby prevent binding of the latter.

What is claimed is—

1. A meat-tenderer comprising a base pro- 70 vided with a stop, a reciprocatory platform mounted on the base and provided with opposite stop projections for limiting the movement of the platform, one of the stop projections being movable and arranged to swing 75 clear of the base to permit the platform to be detached, and a mangling member located above and cooperating with the platform and adapted to reciprocate the same, substantially as described.

2. A meat-tenderer, comprising a base, an intermediate fixed stop device carried thereby, a reciprocatory platform mounted upon the base, and provided with opposite stop projections for contact with the fixed stop 85 device, one of the stop projections being adjustable to clear the fixed stop device, and a swinging mangling member coöperating with

the platform.

3. A meat-tenderer, comprising a base hav- 90 ing an open top, and an intermediate crossbar below the open top, a reciprocatory platform mounted upon the top of the base, and provided with a pendent stop projection extending below the top of the cross-bar to en- 95 gage therewith at one limit of the platform, and a laterally-swinging stop-pin swung from the opposite underneath portion of the platform to engage the cross-bar at the opposite limit of the platform and capable of being 100 swung out of alinement with the cross-bar and a swinging mangling member coöperat-

ing with the top of the platform.

4. A meat-tenderer, comprising a base having an open top, a pair of rollers mounted 105 transversely between the sides of the base and below the top thereof, the intermediate portions of the rollers being reduced, a cross-bar extending between the sides of the base and lying between the rollers, the intermediate 110 portion of the top of the cross-bar being projected above the reduced portion of the rollers, a reciprocatory platform mounted upon the enlarged portions of the rollers, and opposite pendent stop projections carried by the 115 platform, the lower ends of the projections lying below the top of the cross-bar and above the reduced portions of the rollers, whereby the cross-bar forms a fixed stop for engagement by the stop projections.

5. A meat-tenderer, comprising a base having an open top, and opposite inwardly-directed longitudinal flanges antifriction-rollers mounted transversely within the base and below the flanges, a reciprocatory platform, 125 having a pair of pendent longitudinal flanges resting upon the marginal edges of the terminal enlargements of the rollers, and provided in their outer sides with longitudinal grooves receiving the flanges of the base, and a swing- 130 ing mangling member coöperating with the

top of the platform.

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6. A meat-tenderer comprising a base, a reciprocatory platform mounted thereon, a standard rising from the base and provided with a tubular pivot extending over the plat-5 form, a mangling member mounted on the pivot and cooperating with the platform and having a tilting movement on the said pivot, out of line with its normal movement and a coiled spring housed within the tubular pivot 10 and connecting the mangling member with

its bearing, substantially as described. 7. A meat-tenderer, comprising a base, a reciprocatory platform mounted thereon, a standard rising from the base and provided with a lateral pivot-stud overhanging the platform and provided with a longitudinal bore, there being an annular shoulder within the bore, a rocking mangling member coöperating with the platform and rotatably 20 mounted upon the pivot-stud, a handle for the mangling member, an endwise-movable bolt passed through the bore of the pivot-stud and the mangling member, a coiled spring encircling the bolt within the pivot-stud and 25 bearing in opposite directions against the head of the bolt and the shoulder within the bore of the pivot-stud, and a stop device upon the opposite end of the bolt and lying against the mangling member, whereby the latter is 30 capable of being laterally tilted upon its pivotal support.

8. In a meat-tenderer, the combination with a rotatable mangling member having a tapered pivotal opening, of a support therefor, having an externally-tapered pivot-pin to fit 35 the tapered opening of the mangling member, the pin being provided with a longitudinal bore, and an inner marginal shoulder therein, a headed bolt passed through the pin and the mangling member with the head slidably re- 40 ceived within the bore, a coiled spring about the bolt and bearing in opposite directions against the head thereof and the marginal shoulder within the pivot-pin, and a fastening applied to the opposite end of the bolt, where- 45 by the mangling member may be tilted upon its pivotal support.

9. A meat-tenderer comprising a base, a standard having a pivot, a rocking mangling member mounted on the pivot and capable 50 of tilting laterally, means for yieldingly engaging the mangling member, and a reciprocatory platform located beneath the same,

substantially as described.

In testimony that I claim the foregoing as 55 my own I have hereto affixed my signature in the presence of two witnesses.

RUDOLPH STONE.

Witnesses: MONT. BERGSTEIN. PEARL JAUDAIN.