M. L. SHORTRIDGE.

POULTRY KILLING APPARATUS.

APPLICATION FILED JULY 26, 1909.

956,202. **Patented Apr. 26, 1910.**

Fig. 1.

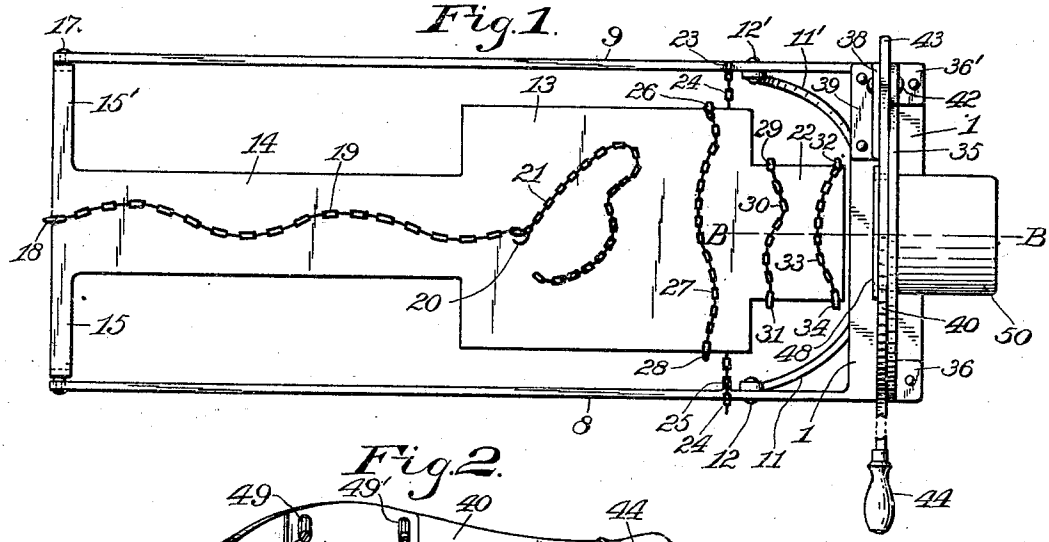


Fig. 2.

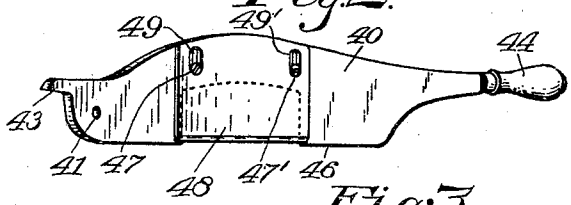


Fig. 3.

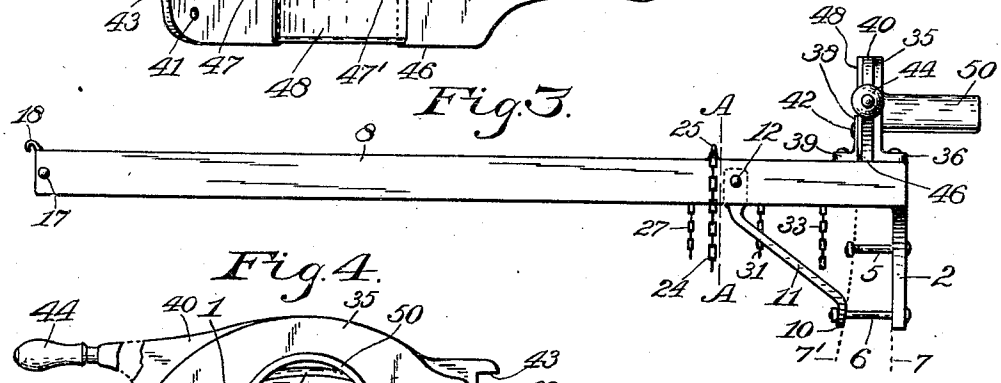


Fig. 4.

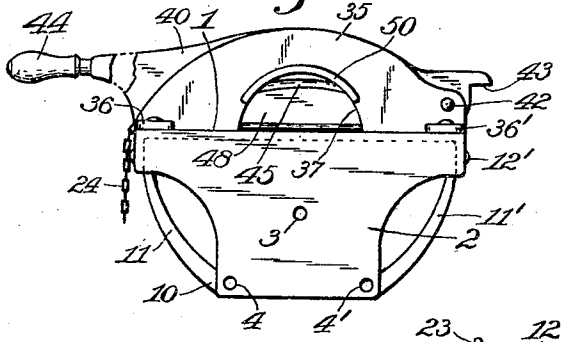


Fig. 5.

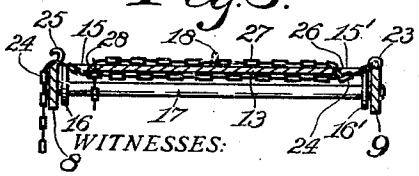
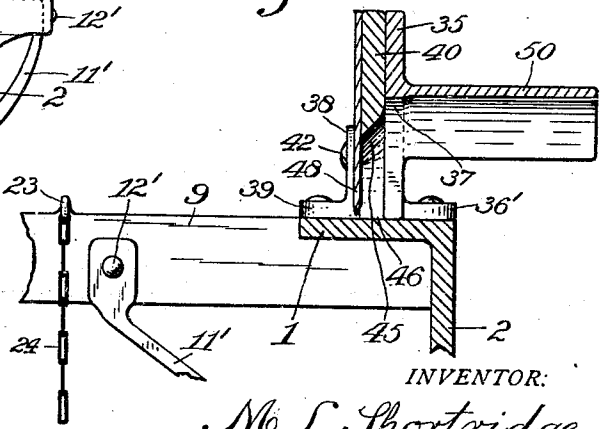


Fig. 6.



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UNITED STATES PATENT OFFICE.

MARTHA L. SHORTRIDGE, OF INDIANAPOLIS, INDIANA.

POULTRY-KILLING APPARATUS.

956,202. Specification of Letters Patent. Patented Apr. 26, 1910.

Application filed July 26, 1909. Serial No. 509,668.

To all whom it may concern:

Be it known that I, MARTHA L. SHORTRIDGE, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Poultry-Killing Apparatus; and I do declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to apparatus whereby poultry may be killed by decapitation and held in a proper manner to permit free bleeding to the desired extent, the invention having reference particularly to apparatus on which a fowl may be placed and held and whereby the head of the fowl may be severed from the neck, the apparatus including adjustable means whereby the fowl may be held either in an inclined position or hung by its legs to permit proper bleeding.

The object of the invention is to provide an improved machine whereby poultry may be killed expeditiously and in a humane and cleanly manner, another object being to provide poultry-killing apparatus that will be adapted to be readily kept in clean and sanitary condition, and be durable and economical in use.

With the above-mentioned and minor objects in view, the invention consists in a machine comprising a frame having a head-plate and two projecting beams thereon, a table pivoted at one end thereof to the ends of the beams, means for adjustably supporting the other end of the table, means for binding a fowl upon the table, and a knife mounted on the frame for cutting off the head of the fowl; and the invention consists further in the novel parts, and combinations and arrangements of parts, as hereinafter particularly described and then pointed out in the accompanying claims.

Referring to the drawings, Figure 1 is a top plan of the machine or apparatus; Fig. 2, a perspective view of the knife and its frame; Fig. 3, a side elevation of the machine; Fig. 4, a front elevation of the machine; Fig. 5, a transverse sectional view on the line A A in Fig. 3; and Fig. 6, a fragmentary longitudinal section on the line B B in Fig. 1.

Similar reference characters in the various figures of the drawings indicate corresponding elements or features of construction referred to herein.

The frame mainly comprises a head-plate 1 which preferably has a flat top and is provided at one side thereof with a downward extending flange 2 having bolt-holes 3, 4, 4′, therein to receive securing bolts 5, 6, whereby the flange and consequently the head-plate may be secured to a post or timber indicated by broken lines 7, 7′. Two beams 8 and 9 extend horizontally from the opposite ends of the head plate and the flange and are thereby mainly supported, but the beams preferably are braced by means of a plate 10 adapted to be connected to the supporting post or timber by means of the bolts 6, the plate having two arms 11 and 11′ thereon that are connected to the beams by means of rivets 12 and 12′ at a suitable distance from the head-plate.

The table comprises a main part 13 on which the body of a fowl may be placed, and an integral shank part 14 extending from one end of the main part, the shank part being preferably somewhat narrower than the main part and having lateral arms 15 and 15′ on its end, which arms are provided with downward extending pivot bearings 16 and 16′, respectively, that are connected to a pivot rod 17 which is connected to the end portion of the beams 8 and 9 so that the table may move up or down at its free end, the end of the shank being provided with a hook or projection 18 to which a link of a chain 19 is connected, the chain being provided with a hook 20 at one end thereof, the said end having another chain 21 preferably of relatively smaller dimensions diametrically that is adapted to be used for binding the legs of the fowl, it being understood that the chain 19 may have any one of its links connected to the hook 18 so as to bring the hook 20 as near as may be desired to the end of the shank. The opposite or forward end of the main part 13 has a relatively narrow extension 22 thereon which extends nearly to the head-plate 1 so that the table may swing freely up or down between the beams 8 and 9, and the free end may be lowered away from the head-plate and between the brace arms past the rear side of the supporting post or timber. Normally the table is adjusted and held in a suitable position so that when a fowl is placed on the table its neck will extend onto the head plate 1. Preferably

the beam 9 is provided with an eye 23 to which one end of a chain 24 is connected, the chain extending under the main part 13 of the table and having one of its links connected removably to a hook or projection 25 with which the beam 8 is provided, so that by disconnecting one link of the chain from the hook and connecting another link thereto the free end of the table may be readjusted as to height. One side of the main part 13 of the table is provided with an eye 26 to which is connected one end of a chain 27 that has its opposite end portion connected adjustably to a hook or projection 28 with which the opposite side of the main part 13 is provided, the chain 27 being intended for binding the body of the fowl onto the main part of the table. The extension 22 of the table is provided with an eye 29 on one side thereof to which one end of a chain 30 is connected, the opposite end portion of the chain being connected adjustably to a hook or projection 31 with which the opposite side of the extension is provided, the chain 30 being adapted to pass over the base portion of the neck of the fowl. The end portion of the extension 22 is provided at one side thereof with another eye 32 to which one end of a chain 33 is connected, the opposite end portion of the chain being connected adjustably to a hook or projection 34 with which the opposite side of the extension is provided. the chain 33 being adapted to be brought over the neck of the fowl near its head, so as to hold the neck down onto the table.

A frame-member 35 which preferably is composed of a metallic plate is mounted uprightly on the top of the head plate 1 and preferably is provided with two feet 36 and 36′ whereby it is secured to the head-plate, the middle portion of the frame-member having an arch-way 37 in its under portion through which the head of the fowl may be passed. Another frame-member 38 is provided with a foot 39 whereby it is secured upon the head plate 1 so that the member 38 stands up rearward of one end portion of the member 35 and parallel thereto. A knife frame 40 has a pivot hole 41 in one end portion thereof to receive a pivot 42 whereby the knife frame is pivotally mounted with its pivoting end between the frame members 35 and 38 to be guided thereby, said pivoting end of the knife frame having a projection 43 thereon adapted to engage the outer side of the beam 9 or the adjacent end of the head-plate 1 when the knife frame is moved upward pivotally somewhat beyond the vertical position, so that the free end of the knife frame may be supported within convenient reach of the operator, the opposite end of the knife frame being provided with a handle 44 for its operation and control. The middle portion of the under side of the knife frame has a recess 45 therein, and the under edge 46 of the knife frame normally rests on the head-plate 1 when not in use or is stopped thereby when the knife frame is swung down to operative position. The knife frame is provided with two screws 47 and 47′ above the recess, and a relatively thin knife 48 is placed against the rear side of the knife frame and has vertical slots 49 and 49′ therein to receive the screws whereby the knife is secured adjustably to the knife frame, so that when the knife is reground and becomes shorter it may be lowered and should be so adjusted that its cutting edge will be near but not in contact with the top of the head plate 1 when the under side 46 of the knife frame rests on the head-plate, to prevent the cutting edge from becoming dulled on the head-plate. With such adjustment there will be no need of a cutting block under the knife, so that no wooden part or other part that would be liable to become foul and hard to clean is required.

In order to prevent the fowl from seeing the descending knife as it approaches the neck of the fowl the frame member 35 is preferably provided with a curved shield 50 that extends from the member above the arch-way 37 forward a suitable distance beyond the forward side of the head plate 1 so as to cover the head of the fowl when it is in proper position for decapitation, and also to some extent the member 35 itself intervenes in the range of vision of the fowl, and therefore the killing may be accomplished in the proper manner and as humanely as may be done under the required conditions.

In practical use the body of the fowl is placed upon the table part 13 and is secured thereto by the chain 27, its head being passed through under the archway 37, with the knife, of course, standing upward out of the way, the neck being confined by the chains 30 and 33. The chain 21 should be passed around one leg of the fowl and connected to the hook 20 and then passed around the other leg and the end portion of the chain connected also to the hook 20, after which the chain 19 should be adjusted as to length with respect to the hook 18, then the knife frame should be moved down pivotally either by the handle 44 or pushed down violently so that the knife will sever the head from the neck of the fowl, after which the chain 24 may be disconnected from the hook 25 to permit the table to swing downward in suitable position for the fowl to freely bleed as desired, the fowl being prevented from struggling and falling from the table by the chains 27, 30 and 33, which may be readily loosened when desired to release the fowl from the table.

All portions of the machine, as will be

seen, may be composed of metal which may be galvanized and may be readily cleansed after having been used.

Having thus described the invention, what is claimed as new is—

1. Poultry-killing apparatus including a frame comprising a head-plate, a knife to coöperate with the head-plate, a table pivoted to the frame remote from the head-plate to swing to or from the head-plate to temporarily support a fowl, removable means for temporarily supporting the free end of the table at the head-plate, the table swinging downward away from the head-plate when the removable means is removed, and means for suspending the fowl when the removable means is removed.

2. Poultry-killing apparatus including a frame having a head-plate at one end thereof, a table having one end thereof pivoted in the opposite end of the frame and extending substantially to the head-plate, the table swinging downward when unsupported, means for adjustably supporting the free end of the table at the head-plate, a chain connected to the pivoted end of the table, a chain connected to the free end portion of the table, and a knife mounted movably on the frame to coöperate with the head-plate.

3. Poultry-killing apparatus including a frame comprising a head-plate and two beams extending from opposite end portions of the head-plate and also an arch on the top of the head-plate, a table having one end thereof pivoted to the free end portions of the beams, removable means for adjustably supporting the other or free end of the table at the head-plate, the table swinging downward from the head-plate when unsupported, means for holding a fowl on the table with its neck under the arch, a knife-frame pivoted upon the head-plate to swing adjacent to the arch, and a knife secured to the knife-frame.

4. Poultry-killing apparatus including a frame comprising a head-plate and also an arch on the head-plate provided with a shield that extends forward from a side thereof above the head-plate, a table mounted adjustably in the frame rearward of the arch and provided with a plurality of chains for holding a fowl thereon with its neck under the arch and the shield, a knife-frame pivoted upon the frame to swing adjacent to the arch, and a knife secured to the knife-frame to be moved thereby past the arch and the shield and substantially to the head-plate.

5. Poultry-killing apparatus including a frame comprising a head-plate and two projecting beams, the head-plate having a flange thereon provided with bolt-holes, a brace comprising a plate having two arms thereon that are secured to the beams and hold the plate opposite to the flange, a table pivoted at one end to the beams remote from the head-plate and provided with binding chains, a chain supported by the beams and supporting the free end of the table at the head-plate, the table swinging downward away from the head-plate when unsupported, an arched frame member on the head-plate, and a knife mounted movably on the frame adjacent to the arched member to coöperate with the head-plate.

6. Poultry-killing apparatus including a frame having a head-plate at one end thereof, a knife movable on the frame to or from the head-plate, a table having one end thereof pivoted to the frame remote from the head-plate and its free end movable toward or from the head-plate, removable means for temporarily supporting the free end of the table adjacent to the head-plate, the table swinging downward from the head-plate when unsupported, and a chain connected to the pivoted end of the table for suspending poultry after decapitation on the table.

7. Poultry-killing apparatus including a frame comprising a head-plate and two beams extending from the head-plate, a chain connected adjustably to the beams in proximity to the head-plate, a table having one end portion thereof pivoted to the beams remote from the head-plate and its other end supported adjustably on the chain in proximity to the head-plate, the table swinging downward from the head-plate when unsupported, a chain connected adjustably to the adjustably supported portion of the table, and a knife mounted movably on the frame to coöperate with the head-plate.

8. In poultry-killing apparatus, the combination of a frame comprising a horizontal head-plate having a downward-extending apertured flange and two relatively long beams extending horizontally from opposite end portions of the head-plate, a table pivoted at one end thereof to the end portions of the beams remote from the head-plate, a chain connected to one of the beams for supporting the free end of the table, the table swinging downward when unsupported, a hook on the other one of the beams to which the chain may be connected, a hook on the pivoted end of the table to support a chain, and a supporting chain having a hook thereon intermediate of its ends, with a knife mounted on the frame to coöperate with said head-plate.

9. In poultry-killing apparatus, the combination of a frame comprising a head-plate and two projecting beams and also a frame member mounted upright on the head-plate, the said member having an archway in its under side and a shield projecting from its front side above the archway and over the head-plate in the opposite direction from the beams, and a table supported adjustably

by the beams, with a knife mounted on said frame member and movable past the rear end of the shield to the head-plate.

10. In poultry-killing apparatus, the combination of a frame comprising a head-plate and two projecting beams, a pivot-rod mounted horizontally in the end portions of the beams, a table comprising a main portion having a shank on one end and a relatively narrow extension on the opposite end thereof, said shank being connected to the pivot-rod and having a hook thereon, said main portion of the table having a hook on one edge and a chain on the opposite edge thereof to be connected to the hook, said extension having a hook on one edge and a chain on the opposite edge thereof to be connected to the hook, the table swinging toward or from the head-plate, a hook on one of the beams, a chain connected to the other one of the beams to extend under said main portion of the table to the hook on said one of the beams to support the free end of the table temporarily, the table swinging downward below the plane of the head plate when its free end is unsupported, and a chain having a hook thereon intermediate its ends and connected to the hook on said shank, with a knife mounted on the frame to coöperate with the head-plate.

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

MARTHA L. SHORTRIDGE.

Witnesses:

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E. T. SILVIUS.