

Dec. 6, 1949

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2,490,761

POULTRY SLAUGHTERING DEVICE

Filed Aug. 29, 1945

Fig. 1

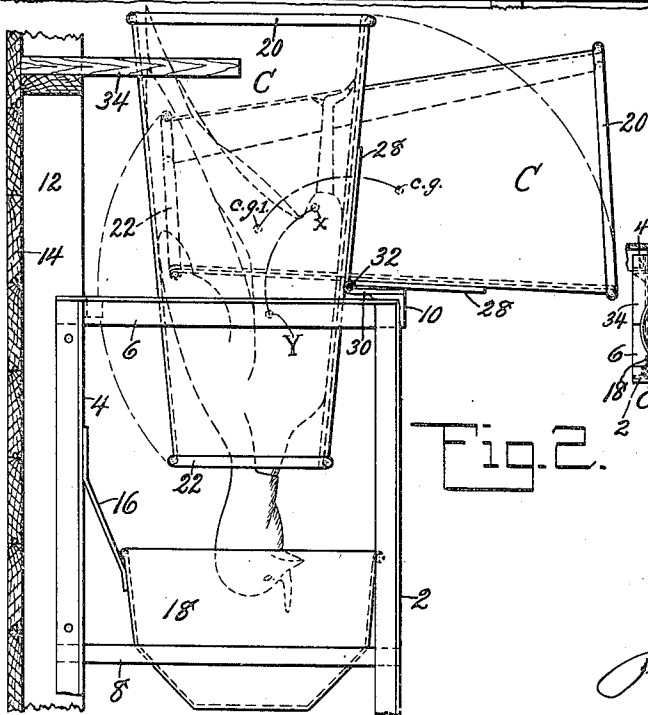
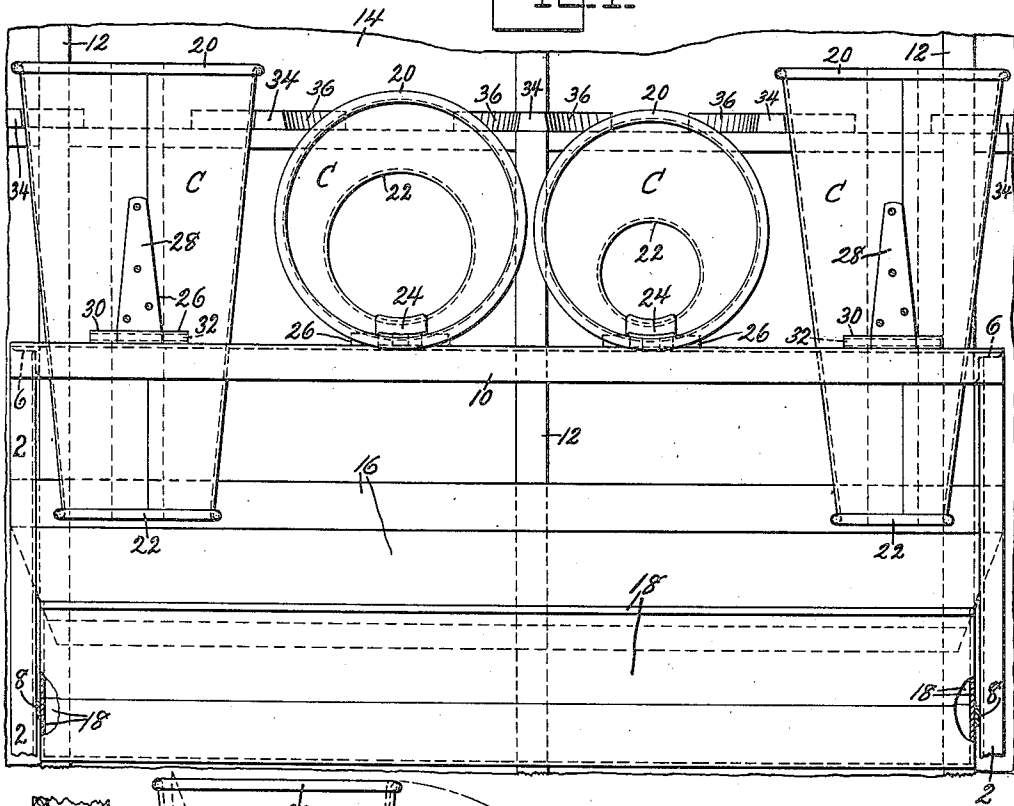


Fig. 3

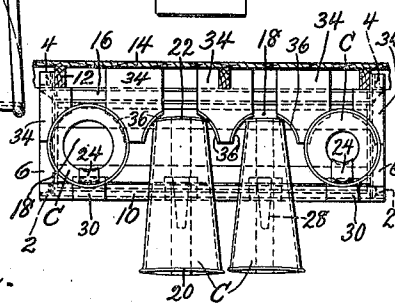


Fig. 2

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2,490,761

POULTRY SLAUGHTERING DEVICE

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Application August 29, 1945, Serial No. 613,265

3 Claims. (Cl. 17-11)

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This invention relates to a slaughtering device designed especially for poultry and is of special value in connection with large poultry, such as turkeys, geese, etc.

Large quantities of poultry are slaughtered daily under unsanitary conditions, that is, after sticking or beheading, the fowl is thrown onto the floor or ground and in its death struggle becomes extremely dirty. In slaughtering smaller poultry, such as chickens, they are frequently hung by the legs in groups for sticking, with the result that their blood is splattered all over the room and all objects in the room. In certain cases chutes or open-ended cans have been provided to receive the fowl, but these cans have been fixed, thereby requiring the lifting of the fowl to a considerable height when alive and then reaching into the can or chute to remove the dead fowl. All of this is very arduous and in case of large birds, such as turkeys, it becomes impossible for a man to do this work for more than one or two hours at a time, for not only is it hard to lift the fowl, but it becomes extremely hard to thrust the fowl into the rigid open-ended can without the fowl doubling the neck back along the breast, with the result that the head is not accessible to the sticker. During the muscular spasms following sticking the fowl becomes more or less wedged into the open-ended can and requires considerable more lift than the actual weight of the bird. It is an object, therefore, of the present invention to provide a slaughtering device into which the bird to be slaughtered may be readily thrust with a minimum of effort.

A further object of the invention is the provision of a slaughtering device into which the bird to be slaughtered can be thrust in a more or less natural and comfortable position for the bird.

A still further object of the invention is the provision of a slaughtering device from which the dead bird may be removed with a minimum of effort.

These and other objects of the invention will be apparent to persons skilled in the art from a study of the following description and accompanying drawings in which

Fig. 1 is an elevational view of the improved slaughtering device;

Fig. 2 is an end view thereof, and

Fig. 3 is a plan view.

Referring now to the drawings in detail, it will be seen that the device is made up of a supporting framework having front and rear angle iron legs 2 and 4, joined together adjacent

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their top by an angle member 6 and adjacent their lower ends by a piece of strap iron 8. The upper ends of the front legs or supports 2 are joined together by a substantially horizontal angle iron member 10. As shown more particularly in Fig. 2 the rear legs 4 may be fastened to the studding 12 of a building or other structure enclosed by walls 14. Attached to the rear supporting legs 4 are straps 16 which assist in supporting a drain trough 18, suitably attached to strap 8 and front legs 2. This drain trough is adapted to catch the blood running from the birds being slaughtered and thereby conserving the blood for feeding or fertilizer purposes.

The open-ended slaughtering cans or containers C are of frusto-conical form having the top edge reinforced by a roll or bead 20, as is also the bottom edge 22. Attached to the inside of the cans, preferably at the seams, are strap members 24 extending from top to bottom of the can and effectively strengthening the same at the point of greatest strain. The cans, as clearly shown, are mounted on angle iron 10 by means of hinges 26. These hinges each have one leaf 28 secured to the cans by means of bolts or rivets passing therethrough and through the reinforcing strap 24. The other leaf 30 of each hinge is riveted or bolted to the horizontal leg of the angle iron 10 and the leaves are joined together by a pintle 32, preferably of the removable type, so that the can may be readily removed for washing or repair in case of damage. The hinges are attached to the cans in such a position that the center of gravity *c. g.* of the empty can will be located above the pintle 32 when in an upright position and outwardly of the pintle as at *c. g.* when the can is in the tilted position (Fig. 2). Buffer means can be attached to legs 2 to hold the cans in the upright position, but since such a location sometimes interferes with sticking of the birds, it is preferred that buffers 34 be attached to the building structure and adapted to receive the upper ends of the cans. These buffer blocks have their forward edges curved as at 36 (Fig. 3) so as to properly hold the cans centered while at the same time limiting their swinging movement. It will, of course, be obvious that these buffer blocks may be attached to extensions of legs 4 in case it is preferred to have the entire slaughtering device located in the room away from a wall. In other words, the legs 4 could be extended and have the buffer blocks 34 attached thereto exactly as they are now attached to the studding 12, which in effect is an extension of legs 4.

In order to use the slaughtering device the cans will be tipped to their horizontal position as shown, after which a bird may be thrust into the can. It will be readily seen that in lifting the bird a person can hold the legs in the left hand and cradle the breast of the bird in the right hand in a more or less comfortable position for the bird. By merely throwing the bird forwardly into the can the natural tendency is for the bird to extend its neck. This tendency is also increased due to the fact that the bird entering the container can see light at the other end. The act of throwing the bird into the container will of itself cause the can to tilt to an upright position. That this will occur is obvious from the momentum of the bird and from the fact that the center of gravity X of the can and bird is located inwardly of pintle 32 when the can is in the horizontal position. Movement of the can to the vertical position causes a lowering of this center of gravity of can and bird to the position Y. In the vertical position the bird is firmly gripped by the walls of the container and the head hangs immediately above the drain trough 18 and in a convenient location for sticking. After sticking the muscular spasms of the bird will, of course, tend to wedge the bird into the can but by the time drainage is completed the bird's muscles are fully relaxed and it is only necessary for the person removing the bird to grasp the legs and pull forward. Pulling forward gives the person removing the bird a mechanical advantage since he has available the leverage from the top of the can to pintle 32 and this leverage is effective to lift the center of gravity, which is equivalent to the center of mass from the position Y to the position X. During the rotation of the can and dead bird there will, of course, be a slight pull on the bird's legs, this together with the relaxed muscular condition and slumping of the bird will permit the bird to be readily and easily slid out of the can into the operator's arms for removal to the scalding and plucking apparatus. From the preceding it will be seen that the live bird may be thrust into the cans or containers with a minimum of effort and without any possibility of the bird's head being doubled back along the breast. It will also be seen that removal of the dead bird is extremely easy due to the fact that practically no effort is required since considerable leverage is available and the center of gravity or mass need be lifted but a very small amount.

While the slaughtering device has been described more or less in detail, it will be obvious that various modifications in the hinging means or supporting structure may be made and that various size cans may be attached to accommodate various size fowls. All the modifications and rearrangements of parts are contemplated which fall within the scope of the following claims defining my invention.

What is claimed is:

1. In a slaughtering device for birds the combination of a support structure, an open ended receptacle of frusto-conical form, and hinged means secured to said receptacle and support structure and providing a pivot about which the receptacle can swing from a substantially horizontal bird receiving position to a substantially vertical bird slaughtering position, said hinge means being secured to said receptacle at a predetermined point so selected as to place the center of gravity of the empty receptacle when in bird receiving position on one side of the pivot and the center of gravity of the receptacle and bird when inserted therein upon the opposite side of the pivot whereby said receptacle will automatically move to bird slaughtering position upon insertion of a bird.

2. In a slaughtering device for birds the combination of a support structure, an open ended receptacle of frusto-conical form, and hinged means secured to said receptacle and support structure and providing a pivot about which the receptacle can swing from a substantially horizontal bird receiving and discharging position to a substantially vertical bird slaughtering position, said hinged means being secured to said receptacle at a predetermined point so selected as to require a minimum lift of the center of gravity of the receptacle and bird during swinging from the slaughtering to the discharging position.

3. In a slaughtering device for birds the combination of a support structure, an open ended receptacle of frusto-conical form, and hinged means secured to said receptacle and support structure and providing a pivot about which the receptacle can swing from a substantially horizontal bird receiving position to a substantially vertical bird slaughtering position, said hinge means being secured to said receptacle at a predetermined point so selected as to place said pivot between a plane substantially parallel to an end of said receptacle and passing through the center of gravity of the empty receptacle and a parallel plane passing through the center of gravity of the combined receptacle and bird.

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