Dec. 15, 1942. S. S. BARKER 2,305,232

APPARATUS FOR DEFEATHERING FOWLS

Original Filed Sept. 5, 1940

Fig. 1.

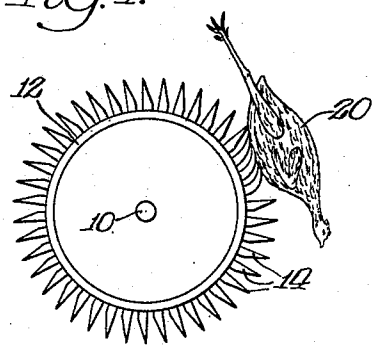


Fig. 2.

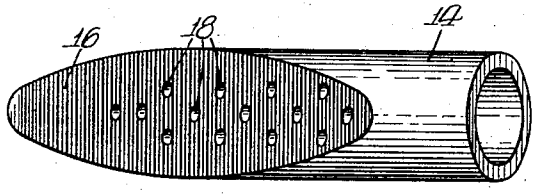
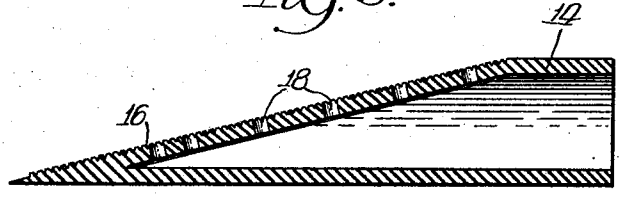


Fig. 3.



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UNITED STATES PATENT OFFICE

2,305,232

APPARATUS FOR DEFEATHERING FOWLS

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Original application September 5, 1940, Serial No. 355,415. Divided and this application November 29, 1940, Serial No. 367,836

3 Claims. (Cl. 17—11.1)

My invention relates to means for defeathering fowls, and this particular application is a division of my application, Serial No. 355,415, filed September 5, 1940.

It is an object of my invention to provide apparatus for defeathering fowls, whereby the fowls are picked cleanly and whereby they are left in good condition for display or for cold storage.

Briefly, my invention consists in a picking rotor having flexible or resilient projections, against which the fowls are held while the rotor is revolved.

With the object stated, and with other objects which will become apparent as the description proceeds, my invention consists in the construction, arrangement and combination of the various parts of my device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawing, in which:

Figure 1 is a side view of an apparatus embodying my invention.

Figure 2 is an enlarged perspective view of one of the flexible or resilient projections used on the rotor.

Figure 3 is a longitudinal sectional view through the device of Figure 2.

In Figure 1 of the drawing the reference numeral 10 indicates a shaft which may be journalled in any suitable supporting bearings, and is rotated by any suitable drive means, the bearings and drive means being omitted from the drawing. The shaft 10 carries a drum or cylinder 12 on which radially projecting fingers 14 are mounted.

Figures 2 and 3 show in detail the construction of the picking fingers 14. Soft rubber is a suitable material, and the finger is made in the form of a cylinder cut off by an inclined plane. The plane surface is provided with transverse ribs or corrugations 16. In order to save material and add to the flexibility of the finger, it may be made hollow as shown in the sectional view of Figure 3. Holes 18 may be provided, if desired, so that the suction apparatus described in Swanson, Patent No. 1,889,228, November 29, 1932, can be used. This is optional, however, and not material to the present purpose.

The fingers are disposed radially around the drum 12, as indicated in Figure 1, and rows of the fingers are disposed longitudinally of the drum.

The fowl 20 is held against the picking rotor as indicated in Figure 1, so that as the rotor turns, the fingers 14 rub along the surface of the fowl, pulling off the feathers.

The transverse ribs give a gripping effect which pulls feathers efficiently, and the plane surface, extending the full width of the finger, covers a wide area of the body of the fowl. The tapered shape resulting from the inclined relation of the plane to the axis of the cylinder causes the finger to bend evenly along its length to conform to the surface, as the finger passes over the body of the fowl. A finger of uniform cylindrical shape, for example, is likely to buckle at some mid-point along its length when it strikes the fowl, and thus not conform closely to the body of the fowl.

Some changes may be made in the construction and arrangement of the parts of my device without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims any modified forms of structure, or use of mechanical equivalents, which may be reasonably included within their scope.

I claim as my invention:

1. A finger for a picking rotor consisting of a cylindrical body of flexible material, truncated along a plane at an angle inclined to the axis of the cylinder, and corrugations on the truncated surface, extending transversely to the axis of the cylinder.

2. In a finger for a picking rotor, an elongated, tapered, hollow body portion formed of flexible material, a flattened working surface thereon, and ribs extending transversely of said working surface.

3. A finger for a picking rotor consisting of a hollow body of flexible material, tapered in shape, and having a flat portion on its outer surface, inclined to the principal axis of the body.

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