July 30, 1935. E. E. POWELL 2,009,704

EGG CLEANING TOOL

Filed April 7, 1934

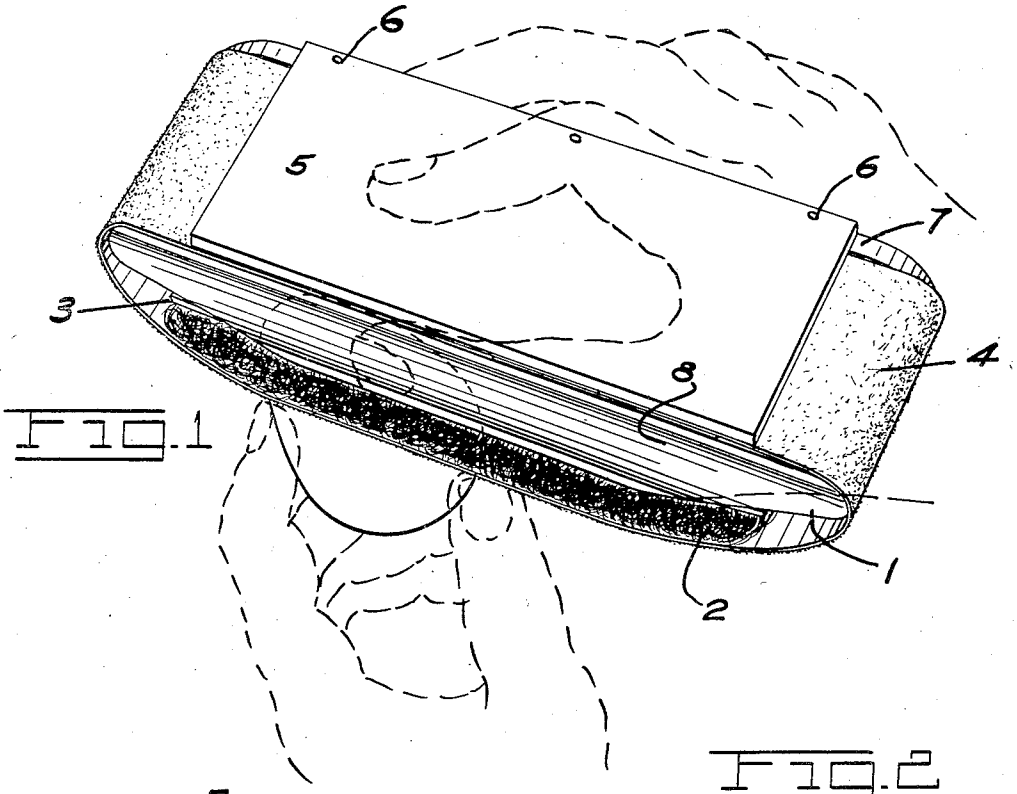
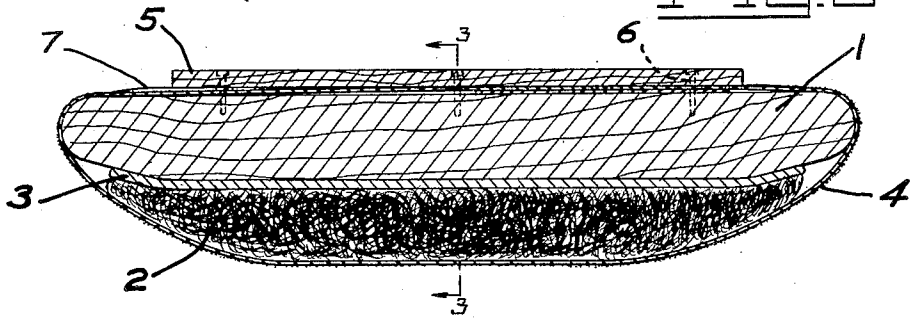


FIG. 1

FIG. 2



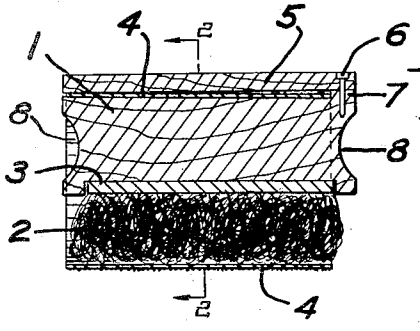


FIG. 3

Inventor

Ellis E. Powell

By Charles L. Reynolds

Attorney

Patented July 30, 1935 2,009,704

UNITED STATES PATENT OFFICE

2,009,704

EGG CLEANING TOOL

Ellis E. Powell, Seattle, Wash.

Application April 7, 1934, Serial No. 719,518

4 Claims. (Cl. 51—187)

My invention relates to a tool which, while capable of a variety of uses, is particularly designed as a hand tool for cleaning eggs.

Machines for the rapid and large scale cleaning of eggs are known, but frequently eggs are encountered which have only spots of slight extent on them, and rather than clean the entire surface of such an egg in the egg cleaning machine it is preferable that the hand tool be employed, by means of which the dirty spots may be quickly removed, and the capacity of the machine is reserved for the eggs which are more generally dirty.

The object of my invention, therefore, is to provide a tool for such uses which is simple and cheap to manufacture, convenient to use, and which is economical of the sandpaper or cloth which is used as the abrasive surface, and in particular which permits adjustment of the sander belt employed to different positions, to accomplish wear throughout its entire extent until it is used up and may be thrown away.

It is also an object to provide a tool of the general character indicated, wherein the hands and fingers of the user are protected from contact with the sander belt, and by reason of the peculiar construction of which the user's fingers when normally grasping the tool will normally and naturally effect a gripping action to prevent slippage of the sander belt.

My invention comprises the improved tool, and the peculiar relative arrangement of the parts thereof, as shown in the accompanying drawing, described in this specification, and as will be more particularly defined in the appended claims.

In the accompanying drawing I have shown my invention embodied in a form of construction which is at present that most preferred by me.

Figure 1 is a perspective view of the tool, illustrating the manner of its use.

Figure 2 is a longitudinal section through the tool on the line 2—2 of Figure 3, and Figure 3 is a transverse section through the tool on the line 3—3 of Figure 2.

The base 1 of the tool may be formed from a block of wood, which is cheap and can be cheaply and conveniently worked. Its ends should be rounded, as seen best in Figure 2, and its under face may, if desired, be grooved for the reception of a soft compressible pad, such as is indicated at 2, the grooves being specifically for the reception of the hide portion 3 of the pad, which may comprise a strip of wool, hide and all. This pad may be glued in place, or might be left loose. The base 1 is substantially rectangular, and about it extends an endles sander belt 4, curving smoothly over the rounded ends of the base. This may be of sandpaper, emery cloth, or any like material, and is made of a size which will snugly fit about the base 1 and the pad 2. The pad can be compressed to facilitate placing a new belt in place.

At the upper face of the base 1, that is the face opposite the pad 2, I secure a cover plate 5 to the base. Preferably this is of such material or so mounted that it is yieldable towards and from the base, and this is conveniently accomplished by forming the cover of a thin strip of wood. It should be spaced somewhat from the upper face of the base, to receive the upper run of the sander belt between them, and hence may be secured by nails 6 to a raised flange 7 extending along one edge of this face of the base. Being yieldingly mounted, or being sufficiently flexible in itself, it will be compressed by the fingers of a hand which grasp the opposite edges of the base, in the manner indicated in Figure 1, and thus will grip the belt 4 between itself and the base. Thus gripping the belt, it will prevent the belt from turning about the base as the tool is stroked back and forth over an egg, notwithstanding the fact that compression of the pad 2 might render the belt sufficiently loose that otherwise it would tend to slip.

To assist in grasping the tool, and to bring the fingers naturally into such a position that they will tend to compress the plate 5, I may provide grooves 8 extending along the edges of the base (see Figure 3). The corners are somewhat beveled, so that no part of the wooden base projects beyond the sander belt where it might strike the egg.

It may be considered that the fingers would naturally engage and hold such a belt from slipping, but persons who handle eggs must have extremely sensitive fingers to avoid breaking or dropping the eggs, and this sensitivity, it has been found, is destroyed if the fingers frequently come in contact with a roughened surface such as that which distinguishes the belt 4. Accordingly it is essential that the upper run of the belt be covered, and the cover plate has the further function of holding the belt against slippage.

When the belt has become worn at one point it may be engaged near the end of the base and rotated about the base to bring a fresh portion into position beneath the pad 2. To facilitate this operation I prefer that the plate 5 stop short of the ends of the base 1, so that the exposed portion of the belt at each end may be grasped

between the thumb and index finger of the user, to be thus rotated about the base and pad.

If the sandpaper were merely extended over the pad and stapled at its ends to the base, the portions thereof which extend over the end, and the portions near the end of the pad would not be available for use, and while it might be replaced when worn out or dirtied by the breaking of an egg, experience with this type of tool has shown that about one-half of the sandpaper is wasted. In one year the expense for sandpaper in a single packing plant was $386, and of this one-half was wasted, hence by making it possible to utilize the entire sanded surface, yet with suitable provision to protect the worker's hands from contact with the sanded surface, the cost of sandpaper can be cut in half.

The device can be cheaply built, is convenient to use, and the entire sander belt may be used up before it is necessary to remove it and replace it with a new one, which is done by slipping it off the base by movement transversely of the base. The manner of its use is clearly illustrated in Figure 1, the tool, held in one hand, being stroked over an egg held in the other hand.

What I claim as my invention is:

1. An egg cleaning tool comprising a wood block constituting a base, of a size and shape to be conveniently grasped by the fingers of a user's hand, a thin wooden plate secured along one edge to the base, and extending across one face of the base, slightly spaced therefrom, a soft pad secured to the opposite face of the base, and an endless sander belt extending around the pad and base, and between the base and the plate, whereby upon engagement of the latter by a hand grasping the tool the plate will grip the belt between itself and the base.

2. An egg cleaning tool comprising a base of a size and shape to be conveniently grasped by the fingers at opposite edges, an endless sander belt extending endwise about such base, to leave the finger-engaged edges exposed, and normally unrestrained against movement under the influence of friction as the belt is moved over the surface of an egg, and a plate unobstructed over its upper surface, and extending over the upper run of the belt, said plate being yieldingly supported from the base and normally spaced sufficiently from the base to exercise no restraint upon the belt, in position to be engaged by the hand which grasps the base, and to be thereby pressed against the belt and to grip the belt to restrain it from movement.

3. An egg cleaning tool comprising a base, an endless sander belt extending about such base, and normally free to turn thereabout, and a plate of flexible material secured along one edge of the base, and spaced sufficiently from the base to exercise no restraint, when unflexed, on the belt, but overlying the belt at one side of the base, to engage and grip the belt when flexed.

4. The combination of claim 3, the plate terminating short of an end of the base, whereby the belt may be engaged by the fingers to advance it about the base.

ELLIS E. POWELL.