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2,504,643

BUTCHER BLOCK SCRAPER AND CLEANER

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Fig. 2.

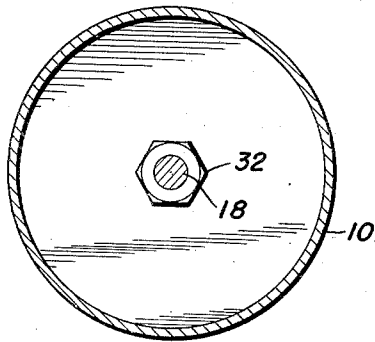


Fig. 1.

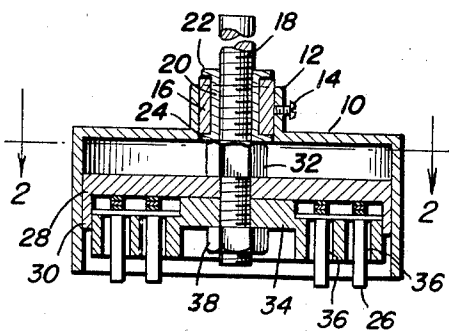


Fig. 3.

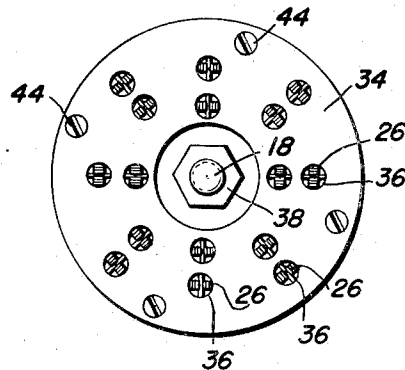
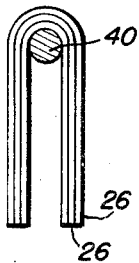


Fig. 4.



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BUTCHER BLOCK SCRAPER AND CLEANER

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2 Claims. (Cl. 15—93)

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This invention appertains to novel and useful improvements in devices for cleaning and scraping butcher blocks.

An object of this invention is to provide means for scraping the upper surface of a butcher block, thereby cleaning the same.

Another object of this invention is to provide adjustable means adapted to be gripped by the hand, whereby the effective length of brush elements may be regulated.

Another purpose of this invention is to provide improved means for retaining brush elements in a device for scraping butcher blocks.

Another purpose of this invention is to provide an extremely simple device of the character described which lends itself well to commercial manufacture.

Ancillary objects and features of novelty will become apparent to those skilled in the art, in following the description of the preferred form of the invention, illustrated in the accompanying drawings, wherein:

Figure 1 is a sectional view of the preferred form of the invention;

Figure 2 is a sectional view taken substantially on the line 2—2 of Figure 1 and in the direction of the arrows;

Figure 3 is a bottom view of the device with the showing of the housing and the top retaining plate excluded therefrom;

Figure 4 is a detailed sectional view illustrating particularly the means for clamping the brush elements in the device.

This invention has been conceived and developed for the purpose of providing a device for cleaning butcher blocks and also for scraping the same. Heretofore, this operation was performed manually by use of wire brushes, knives and other manually operative tools or instruments.

It is within the purview of the present invention to provide a power actuated device which is readily manipulated and which may be adjusted for various depths of cut to be taken, as dictated by the condition of the butcher block and the type of wood utilized therein.

A housing 10 is provided, preferably of circular configuration and has a collar 12 extending therefrom. An aperture (unnumbered) is provided in the said collar for the purpose of receiving any suitable friction securing means such as the set screw 14.

Received in the said collar 12 is a bearing 16, which is adjustable relative to the longitudinal

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axis of the said collar 12 through the medium of the friction securing means 14.

A suitable drive shaft 18 which may be a portion of a flexible shaft construction or the like, extends through the opening in the bearing 16 and is spaced therefrom by means of a sleeve 20. This sleeve 20 may be threadedly received on the said shaft 18 and is provided with a pair of peripheral flanges 22 and 24 respectively. These flanges retain the bearing 16 in a desired position relative to the sleeve 20. Of course, the said flanges 22 and 24 respectively serve the purpose of thrust bearings, limiting the axial travel of the bearing 16.

Also provided in the said housing 10 is an improved means for retaining brush elements 26. A plate 23 having a flange 30 therearound is provided on the shaft 18. A backing nut 32 may be supplied on the said shaft 18 and serves the purpose of a thrust bearing for the said plate 23. A second plate 34 having a plurality of apertures 36 therein is firmly seated against the lower portion of the said plate 23. Another nut 38 may then be supplied on the said shaft 18 for the purpose of maintaining the plates 34 and 23 respectively in the proper juxtaposed position.

Slots (unnumbered) are provided in the lower plate 34 and communicate with the said apertures 36. A small shaft 40 is supplied in each of the said slots and has a plurality of brush elements 26 wrapped therearound. These brush elements may be of any suitable material such as spring steel, bronze or the like.

By the aforementioned structure, it is readily apparent that the brush elements may be and are detachably received between the said plates 34 and 23 respectively and also, the effective length (that portion of the elements extending below the housing 10), of the elements is adjustable by manipulation of the said housing on the bearing 16.

To further assist in retaining the lower and upper plates 23 and 34 respectively in the locked or juxtaposed relative positions, a plurality of screws, rivets or the like 44 may be supplied about the edge of the lower plate 34.

Of course, any suitable source of torque may be used in association with the said shaft 18 such as an electric motor or the like. In assembly, the bearing 16 is disposed between the flanges 22 and 24 of said sleeve 20. Any known expedient for placing these two elements in this relation is resorted to as having the bearing 16 split so that it may be inserted between the flanges. Then the screw 14 is passed through a hole in

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the collar 12 so that it presses firmly against the bearing 16. The shaft 18 is threaded in the bore of the sleeve 20 and the jamb nut 32 tightened against the bottom flange 24 of the sleeve 20 so as to lock the sleeve, nut 32 and shaft 18 assembled.

After threading the brush elements 26 through the apertures 36 and arranging the plates 34 and 28 in nested relation, the lower end of the shaft 18 is passed through the central apertures in these plates and the nut 38 applied.

The device is now in readiness for operation to clean butcher blocks or any other surface adaptable to be cleaned by an article of this nature.

Having described the invention what is claimed as new is:

1. A butcher block scraper comprising a housing having an open end and a cover over the opposite end, said cover having an opening of smaller diameter than said open end, a collar fixed to the cover and disposed around said opening, a bearing disposed in said collar and means passed through an aperture in said collar retaining said bearing in said collar in selected axially adjusted positions, a sleeve mounted in said bearing for rotation and axial adjustment therewith, a shaft passed through and fixed to said sleeve, a first plate disposed in said housing, a second plate superposed on said first plate and disposed in said housing and having a plurality of apertures, brush elements having their ends passed through said apertures, portions of the brush elements intermediate their ends being clamped between said plates, and means adjustably carried by said shaft and disposed above and below said plates holding said plates together to retain said brush elements substantially immovable relative to said plates.

2. A butcher block scraper comprising a housing having an open end and a cover over the

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opposite end, said cover having an opening of smaller diameter than said open end, a collar fixed to the cover and disposed around said opening, a bearing disposed in said collar and means passed through an aperture in said collar retaining said bearing in said collar in selected axially adjusted positions, a sleeve mounted in said bearing for rotation and axial adjustment therewith, a shaft passed through said sleeve, a first plate disposed in said housing, a second plate having an annular recess and disposed in said housing, said recess being disposed in confronting relation with said first plate and having a plurality of apertures opening in said recess and passed through said second plate, brush elements having their ends passed through said apertures, intermediate portions of said elements being disposed in said recess and contacting both of said plates, means carried by said shaft holding said plates together to retain said brush elements substantially immovable relative to said plates, a portion of said last mentioned means engaging said sleeve and locking said shaft to said sleeve.

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