May 26, 1931. P. A. CROSS 1,807,281

BRUSH

Filed Nov. 20, 1929

Fig. 1.

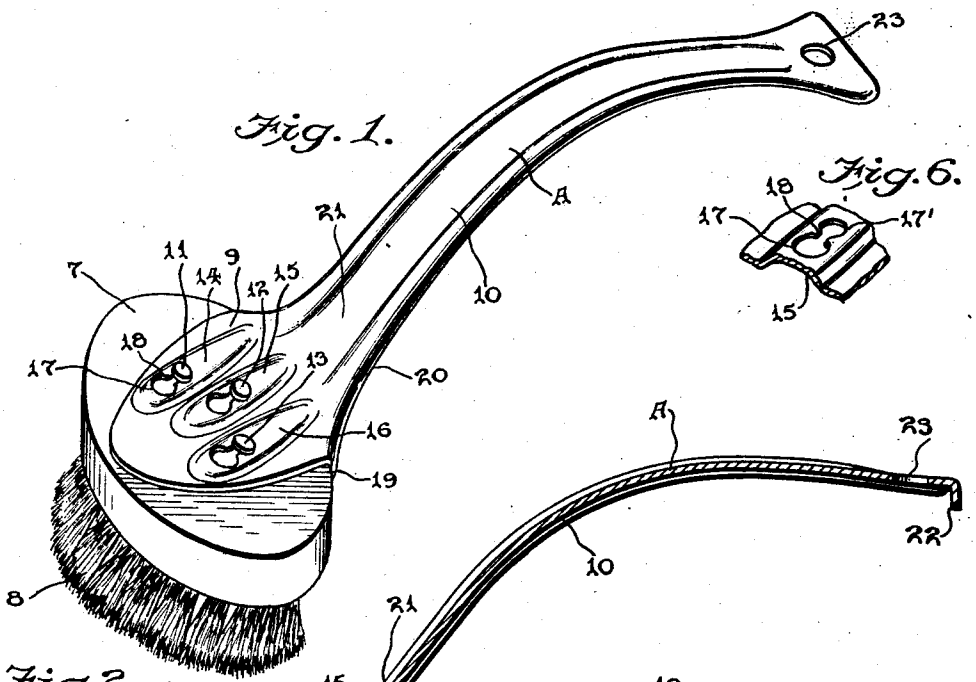


Fig. 6.

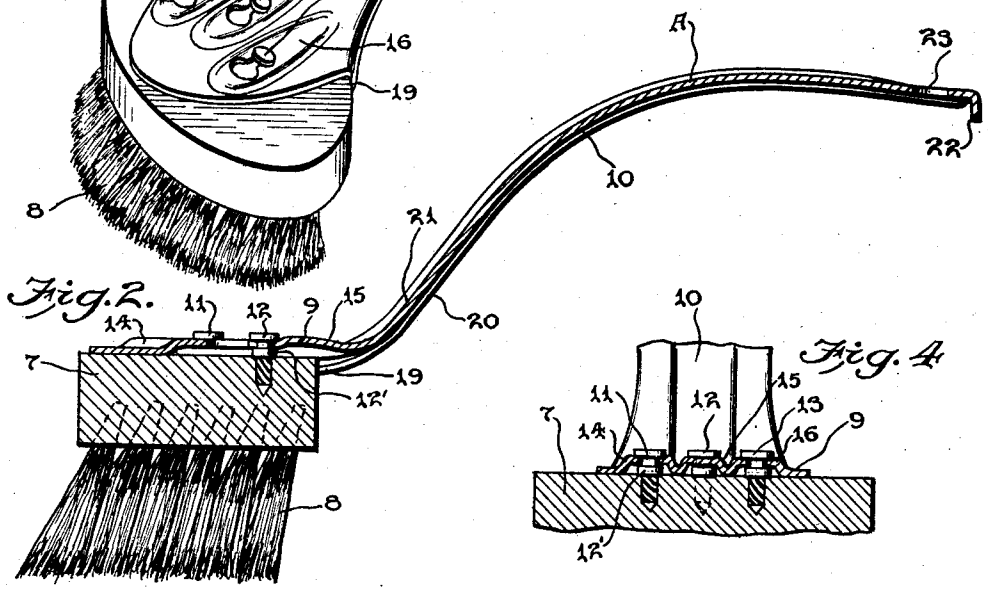


Fig. 2.

Fig. 4.

Fig. 3.

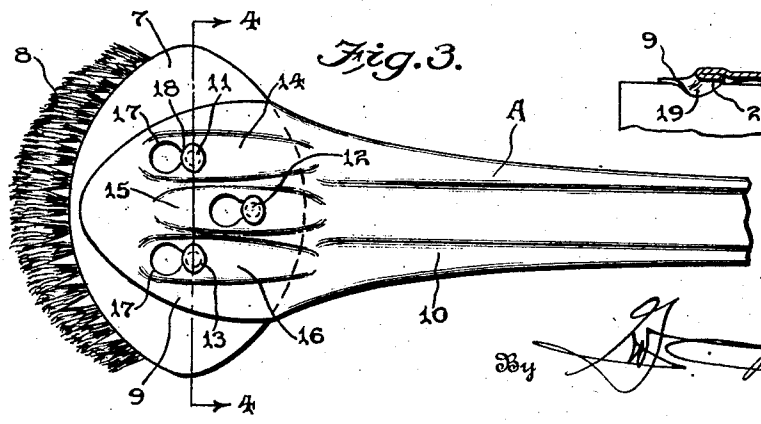


Fig. 5.



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UNITED STATES PATENT OFFICE

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BRUSH

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This invention relates to brushes.

One object of the invention is to provide a simple, inexpensive, durable and efficient brush, particularly adapted for cleaning pans, pots, kettles, dishes or other similar utensils or articles.

Another object of the invention resides in the provision of a holder for the brush which is so shaped and constructed as to provide for ready detachable connection with the head of the brush so that in the event of undue wear of either the brush or the holder or breakage of either, a new brush or a new holder may be substituted as the occasion arises.

A still further object of the invention is to provide a brush, including a holder which may be readily secured to or detached from the brush and which has a shape of a nature to provide for a comfortable and pleasing grasp of the handle portion thereof when using the brush.

With these and other objects in view, the invention consists in the construction and novel combination and arrangement of parts hereinafter described, illustrated in the accompanying drawings, and set forth in the claim hereto appended, it being understood that various changes in the form, size and minor details of construction, within the scope of the claim, may be resorted to without departing from the spirit of the invention or sacrificing any of the advantages thereof.

In the drawings:—

Figure 1 is a perspective view of the invention.

Fig. 2 is a longitudinal sectional view.

Fig. 3 is a fragmentary plan view.

Fig. 4 is a detail sectional view through the brush head and the handle illustrating the connection between these two elements, same being taken on line 4—4 of Fig. 3.

Fig. 5 is a transverse sectional view through the handle portion of the holder looking toward the brush head.

Fig. 6 is an enlarged detail view illustrating one of the hollow ribs to show the seat for the headed elements of the securing means.

Referring now more particularly to the accompanying drawings, the reference character 7 indicates a substantially oval or other shaped brush head of wood or other similar material provided with metal or other bristles 8 arranged preferably upon a forward incline so as to permit ready access of bristles to corners and especially along the line of joint between the bottom and sides of pans or other utensils.

A holder A of peculiar form and constructed of sheet metal or other suitable material is provided for the brush and includes a spatulate shaped attaching portion 9 and curved handle portion 10.

Headed handle attaching elements 11, 12 and 13 project from the upper face of the brush head 7, the elements 11 and 13 being preferably in alignment and offset with relation to the intermediate headed element 12, as clearly shown in the drawings. These headed attaching elements may be of any suitable type, but as shown, their shanks are preferably roughened so that when driven into the head 7 they are not subject to ready accidental extraction or dislodgment. Each headed element carries a collar 12′ which forms a stop to limit the movement of the headed element when driven into the head 7. This insures the upper faces of the heads being in horizontal alignment when positioned and facilitating effective connection between the headed elements and the handle. The spatulate shaped attaching end 9 of the handle A is provided with three hollow ribs 14, 15, and 16 with the intermediate rib 15 being preferably longer than the side ribs, the latter flanking the intermediate rib and the intermediate rib being disposed in the longitudinal axis of the handle and extending preferably slightly beyond the inner edge of the brush head, as shown. Each rib is provided with an opening intermediate its ends and each opening is preferably larger at one end as indicated at 17 to receive the respective head of the headed attaching elements. The hollow ribs are arranged close together and form intervening narrow gripping portions, as clearly illustrated in Fig. 4 of the drawings. These

narrow gripping portions extend longitudinally of the ribs and engage the upper face of the brush head and assist in preventing lateral movement of the handle and in securing a firm attachment of the handle to the brush head.

In other words, when applying the holder to the brush head the enlarged portions 17 of said openings are fitted over the heads of the headed elements and the handle is then forced outwardly causing the shanks of the headed elements to move into the narrow portions 18 of the openings until the heads of the headed elements reach the limit of movement in the narrow portions 18 of the openings. The heads of the headed elements are preferably slightly elongated with their elongations extended transversely of the handle portion of the brush and at the closed ends of the narrow portions 18 of the openings the metal of the ribs is slightly depressed forming a seat into which the heads of the headed elements snap when the handle is applied to the brush. The metal is relatively thin and incident to the hollow ribs 14, 15 and 16 being pressed into the metal there is some resiliency given the ribs and effecting a snug engagement of the underfaces of the heads with the ribs and providing for an effective seating of the heads in the depressed portions 17′ at the closed ends of the narrow portions of said openings. The result is that there is effected a tight connection between the handle and the brush head incident to the riding of the heads on the ribs at the sides of the narrow portions of said openings. The connection is such as to prevent lateral play of the handle on the brush head when the brush head and handle are connected together by positioning the headed elements in the seat 18 of the ribs. However, means may be provided to reinforce the three point connection of the handle with the brush by deflecting portions 17′ of the inturned flanges 20 along the longitudinal edges of the handle portion 10, these deflecting portions 19 being so formed as to bear tightly against the inner side of the brush head as shown.

The handle portion 10 may be of any particular formation, but as shown is preferably curved and in the upper surface adjacent the inner edge of the brush head there is a depression 21 designed to receive the thumb of the user and enabling an effective grasp upon the handle for cleaning or scraping purposes.

If desired, the handle portion may be provided with a scraper 22 at its outer end and it may also be provided with an aperture 23 whereby the brush may be suspended from a nail, hook or the like when the brush is not in use.

From the foregoing, it will be seen that I provide an ornamental form of handle for brushes serviceable particularly in scrub bing, and cleaning, cooking or similar utensils or articles, and in which the handle may be readily secured to or detached from the brush, enabling the ready substitution of either a handle or a brush in the event of wear or breakage.

What is claimed is:

A brush holder including a substantially spatulate shaped attaching portion and a handle portion, the attaching portion having a series of hollow ribs arranged close together to form intervening narrow brush head gripping portions extending longitudinally of the ribs, each rib being provided with an opening having a wide portion and a narrow portion, the narrow portion of each opening being slightly depressed to form a seat, said openings being adapted to receive headed fastening elements projecting from the upper face of a brush head to permit the heads to pass through the wide portions and slide in the narrow portions of said openings to seat the heads of the headed elements in said seats and thereby detachably secure the holder to a brush head, one of the said ribs being extended inwardly beyond the others and the inner portion of the extended rib constituting a thumb receiving portion and thereby affording a firm grip on the handle, said handle having inturned side flanges extending longitudinally of the handle and provided with laterally deflected outer terminal portions arranged to fit against one of the side faces of the brush head to coact with said headed elements to prevent twisting of the holder on the brush head.

In testimony whereof, I have hereunto affixed my signature, this 19th day of November, 1929.

PAUL A. CROSS.