

Feb. 7, 1928.

1,658,153

S. APPLIN

SCOURING DEVICE

Filed June 17, 1924

2 Sheets-Sheet 1

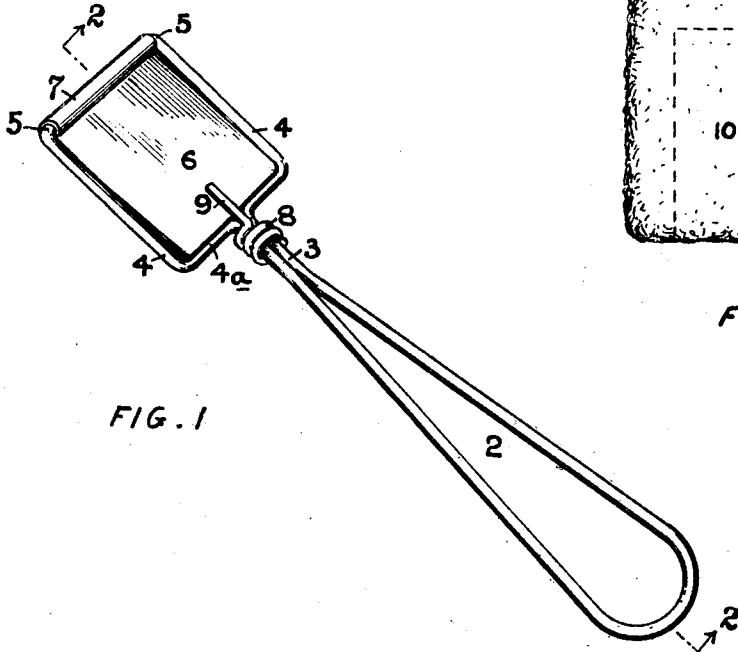


FIG. 1

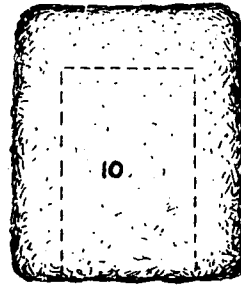


FIG. 3



FIG. 2

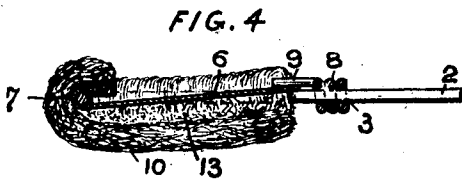


FIG. 4

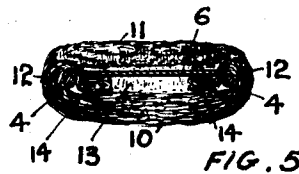


FIG. 5

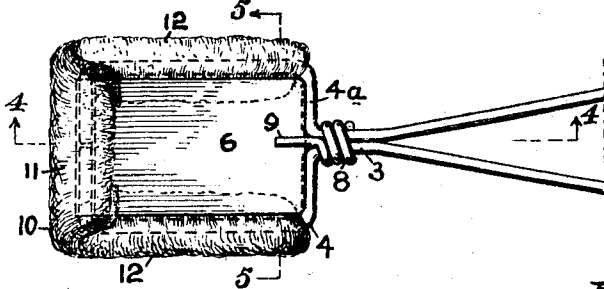


FIG. 6

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FIG. 3a

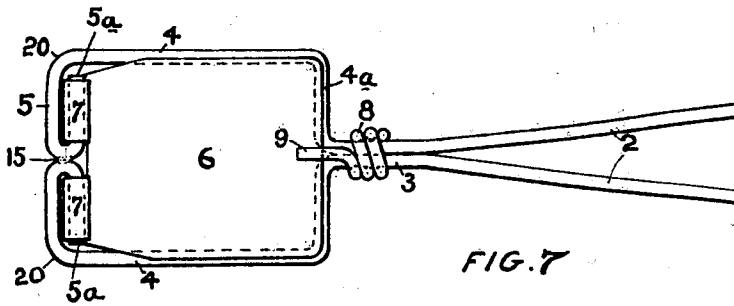
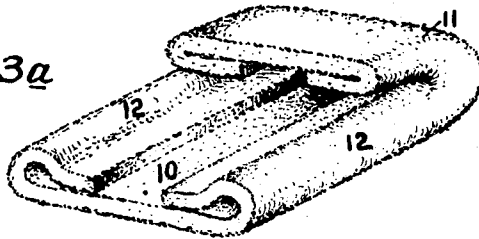


FIG. 7

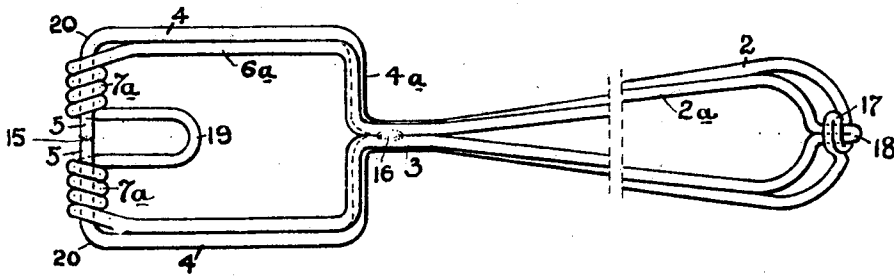


FIG. 8

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SCOURING DEVICE.

Application filed June 17, 1924. Serial No. 720,492.

The object of this invention is to provide a construction of scouring device for use in work carried on about kitchen sinks, such as in scouring pots and pans with pads of material of the character known as "steel wool."

Heretofore, scouring pads of metal in fine wire-like form or "steel wool" have been held by the hand and their cleansing and abrading qualities secured by hard rubbing upon the object, whether it be pots and pans or the iron sink itself; but experience has shown that the injury thereby caused to the hand is very material and objectionable, even to creating soreness.

The purpose of the present invention is primarily to provide a device in the form of a detachable handle (preferably made largely of wire), by which the pads of "steel wool" may be suitably clamped and held in the holder or handle so that its abrading capacity may be effectually applied to the object, without requiring the hand to directly contact with the scouring pad or with the strong soap or lye which may be applied to it as a cleansing compound.

My invention consists of a pad of abrading or scouring capacity folded along parallel lines adjacent to its side edges to provide a two-ply structure and also folded transversely near one end to provide a four-ply structure adjacent to its corners, combined with a metallic holder having means for detachably being clamped to the pad, said clamping means partly enclosed within the plies of the folded pad and shielded thereby.

More specifically, my improved scouring device consists of a body preferably rectangular, from which a handle part extends, said body provided with a clamping member, desirably in the form of a plate, hinged to one end of the same and having its free end clamped down upon and held to the body member by an adjustable locking means carried on the handle or otherwise, the clamping member arranged to grip the side portions of a scouring pad at each side of the body member in such manner that its sides are protected by the enveloping pad itself, the latter being detachably secured in an extended form across the area of the body member.

My invention also comprises the association of body and clamping members hinged together and presenting an extended area, combined with a flat pad of pliable scouring

material stretched wholly over one side of the body member and also over its bounding side edges and clamped thereto by the clamping member, said pad folded upon itself along its opposite side edges and also extending beyond the body member at its end and said extended end of the pad folded backward upon itself to provide a multiply portion at its folded end.

My invention also consists of other features of construction which, together with those above stated, are fully described hereinafter and pointed out in the claims.

Referring to the drawings: Fig. 1 is a perspective view of the handle portion of my improved scouring device; Fig. 2 is a sectional view along the length of the same, taken on line 2—2 of Fig. 1; Fig. 3 is a plan view of one of the pads employed with my invention; Fig. 3^a is a perspective view showing same in folded condition; Fig. 4 is a longitudinal sectional view taken on line 4—4 of Fig. 6, with the scouring pad clamped in position; Fig. 5 is a cross section of same taken on line 5—5 of Fig. 6; Fig. 6 is a plan view corresponding to Fig. 2, but with the steel wool pad clamped in position; and Figs. 7 and 8 are plan views illustrating two modified forms of the metal holder portion of my invention.

The complete device comprehends the metallic holder means shown in Figs. 1 and 2, associated with the scouring pad shown in Fig. 3, when in folded condition illustrated in Fig. 3^a. I will first describe the metallic holder means.

2 is a wire handle and the wire of which it is formed is continued in shape to provide a rectangular body frame 4 having the transverse bars 4^a adjacent to the handle 2 and the transverse hinge bars 5 at the opposite end. A rectangular clamping member 6, preferably of sheet metal, is hinged by the tubular end 7 upon the transverse hinge bars 5, said plate being free to swing relatively to the body and of a length sufficient to rest upon the transverse bars 4^a when in clamping position as shown. This clamping member 6 may be locked in clamping position by the locking means comprising a slidable collar 8 having the retaining bolt 9 and movable along the neck 3 of the handle 2 adjacent to the bars 4^a. This collar not only acts as the adjustable locking means but also holds the wires of the handle together at 3 and maintains the hinge bars 5 in hinged rela-

tion with the clamping plate member 6. The width of this plate member is such that it will clamp the pad member and such width may vary so long as the plate acts to clamp the pad to the body member 4. In Figs. 1, 2, 5, 6 and 8, the plate clamping member is of slightly less width than the width of the space between the side bars of the body 4, but in Fig. 7, the said plate is greater in width so as to rest upon and in clamping relation with the side bars of the body as well as upon the transverse bars 4^a, and I do not restrict myself in this respect.

The scouring pad 10 may be of "steel wool" or other material, as preferred, and in area it is considerably wider and longer than the body member 4, so as to provide side portions 14 to be clamped between the side edges of the clamping plate 6 and the body side bars and an end portion to be folded over the end of the body, as clearly shown in Figs. 4, 5 and 6. In positioning the pad, the plate 6 is lifted, the body member 4 is laid upon the pad as indicated in dotted lines in Fig. 3, the side edges of the pad are folded over the side bars of the body member and the plate member 6 is pressed down to clamp the pad about said side bars, as shown in Fig. 5. The plate is then locked by the bolt 9 of the sliding collar 8. Finally, the end of the pad extending beyond the end of the body is folded back upon itself as shown in Figs. 4 and 6. In doing this, the pad takes on the shape clearly shown in Figs. 3^a in which the pad is shown as if the metal holder device was removed without disturbing the folded shape of the pad. It will be seen from Figs. 3^a, 5 and 6 that the pad provides the side portions 12 covering the side bars of the body member and the end fold 11 provides a covering over the end bars and hinge structure of the clamping member with the body member. It is manifest, from Figs. 3^a, 4, 5 and 6, that the pad is folded two-ply along the side portions and four-ply upon the end where the greatest wear is had in use of the device. The pad being formed of fine ductile metal hair-like wire closely intertwined, is of a structural nature that it remains set in any shape it may be put and consequently when the end is folded backward, as at 11, it remains "put" and retains this multiple ply condition in continued use.

When the pad is applied to the clamping members, it is evident that the bottom layer 10 rests upon the pad side edges 14 to give a two-ply structure, leaving a space 13 between the pad side edges 14 (Figs. 4 and 5), from which more elasticity is insured so that the pad will adapt itself to uneven surfaces to be scoured. The use of a plate 6 as one of the clamping members acts as a protecting covering over the side edges 14 of the pad and prevents accumulation of dirt and objec-

tionable matter and also makes the device more easily washed.

In Fig. 7, I have shown a modified construction in which the end bars 5 are bent back upon themselves, as at 5^a, about which the hinging 7 of the plate member 6 is made, the adjacent bends of the parts 5, 5^a, acting to centralize the plate 6 in respect to the side bars of the body member 4. While the wire connecting the body member and the handle member to form the neck 3 are united by the sleeve 8 of the locking device 9, as in the case of the other figures, the abutting ends of the end bars 5 may be spot welded as at 15 to give more rigidity, if so desired. This spot welding may also be applied to the bars 5 in the construction shown in Figs. 1 and 6, as more fully shown in Fig. 8 at 15. In Fig. 7, I have also shown the plate 6 as somewhat wider than in Fig. 6, so that its lateral edges may press upon the side bars of the body member 4 instead of having capacity for passing between them. The application of the pad 10 to the members 4 and 6 of Fig. 7 is in all material respects the same as that already described in connection with the construction shown in Figs. 1 to 6 inclusive.

In the modification shown in Fig. 8, the clamping members 4 and 6^a are of substantially the proportions shown in Fig. 1, but instead of a plate 6, the corresponding member is made of wire coiled, as at 7^a, to provide a hinge about the end bars 5 of the body member. This clamping frame 6^a may be extended into a secondary handle portion 2^a which may interlock with the handle portion 2 of the body member by having a finger 18 adapted to interlock with a hook portion 17. In the construction shown in Fig. 8, the wire parts adjacent to the neck portions 3 may be spot welded, as at 16, to provide rigidity. The end bars 5, 5, are spot welded at 15, as before stated, and the coils 7^a constituting the hinges may be connected by a looped wire portion 19 extending inward in substantial alinement with the wire portion 6^a, and in that manner act as a support for the upper fold 11 of the pad at or adjacent to its middle part.

It will further be noted, in Figs. 7 and 8, that the corners 20 of the body member 4 are rounded so that there are no abrupt edges to produce abnormal wear upon the steel wool or pad which envelopes it and, therefore, with such rounded corners there is less wear upon the pad. It is manifest that, if desired, the second handle 2^a may be omitted and the clamping member 6^a locked in clamping position by the same means 8 and 9 shown in the other figures of the drawing.

While the folding of the pad in connection with the body and clamping members may be initially as shown in Figs. 3^a, 4, 5, 130

and 6, it is to be understood that if from usage the corners of the pad at the hinged end of the members should become worn through, the clamping member may be released and the pad adjusted further toward the hinged end of the members and thereupon reclamped and the extended portion folded back over the hinged joint so that additional pad covering is provided over the corners at the hinged end of the holding means. While this reduces the whole area of the pad on the underside of the holder means, this is not objectionable as the main work of scouring comes upon the portion thereof adjacent to the hinging elements of the body and clamping members. The pad is, therefore, adjustable longitudinally along the side bars of the body frame.

While I have shown the body member and the clamping member of rectangular forms and which is deemed to be the best construction, I do not restrict myself to this particular shape as other shapes for these parts may be employed, if so desired, provided, however, that the pad is clamped to the body member in extended condition and the edges of the pad are clamped over the boundaries of the body member and extended so as to be folded backward over the jointed connection of both the body and clamping members.

It will now be apparent that I have devised a novel and useful construction which embodies the features of advantage enumerated as desirable, and while I have in the present instance shown and described the preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that I do not restrict myself to the details, as the same are susceptible of modification in various particulars without departing from the spirit or scope of the invention.

Having now described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A scouring device, comprising a metallic holder including a frame having substantially parallel sides, a clamping member jointed thereto and of a size to closely grip a scouring pad between it and the sides of the frame, locking means for holding the foregoing frame and clamping member in clamping relation, and a pliable scouring pad folded along parallel lines about the sides of the frame and clamped thereon by the clamping member, said pad extending beyond the jointed connection of the frame and clamping member and having a portion

folded backward and retained over said members adjacent to their jointed ends.

2. In a scouring device, a rectangular body member formed of a wire and having a handle, a unitary clamping member hinged to the body member at the side thereof most distant from the handle and of less width than the opening through the body member, a locking means for holding the clamping member in clamping relation with the body member, a pliable scouring pad of ductile metallic material folded along parallel lines to enclose the side edges and one face of the body member and held in clamped position thereon by the clamping member, said pad extending beyond the hinged connection of the body and clamping members whereby one face and side edges of the body member are substantially covered with the pad and said pad further having a portion folded backward and over the hinged connection to the opposite side of the body member and retained in said shielding relation when the device is in use in the act of scouring.

3. A holding means for a pad of a scouring device, comprising a body member formed of a rectangular wire frame having one end extended into a handle and the other end forming an end bar, a clamping member formed of a rectangular plate hinged to the end bar of the body member and having its side edges extended close to the side bar thereof, and an interengaging locking means between the body and clamping members for holding the clamping member in clamping relation with the body member.

4. The invention according to claim 3, wherein the end bar is formed by oppositely directed wire portions each bent back upon themselves and upon which latter portions the clamping member is hinged, whereby the sides of the body member continues into the end bar by means of smooth curved wire portions.

5. The invention according to claim 3, wherein further, the body member is covered on one side with a scouring pad whose side edges are folded over the opposite sides of the body member and clamped thereto under the clamping action of the sides of the clamping member, and in which further, the scouring pad extends beyond the hinged end of the two members and is folded backward over said hinged ends to shield them.

In testimony of which invention, I hereunto set my hand.

SAMUEL APPLIN.