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CLEANING IMPLEMENT

Filed March 8, 1960

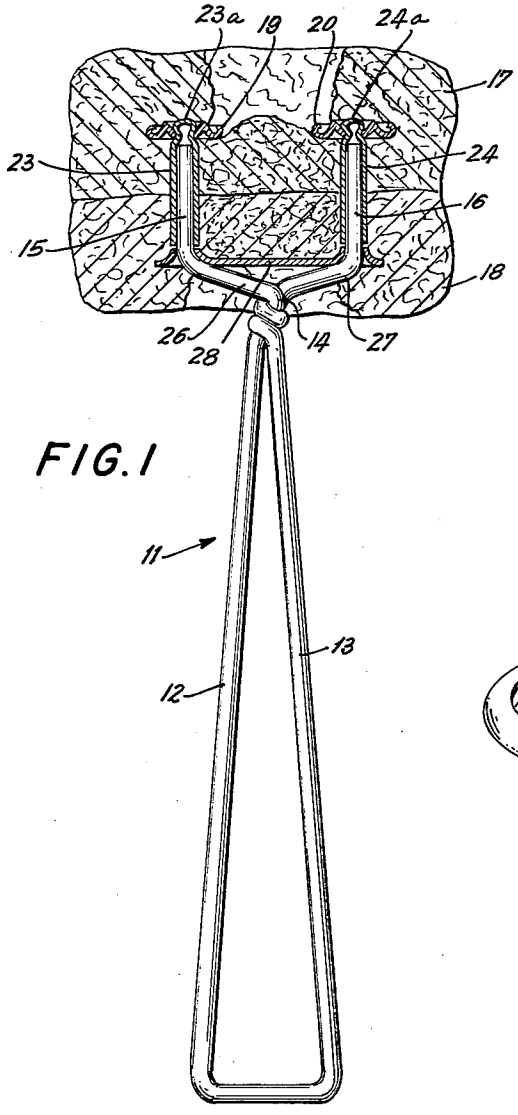


FIG. 1

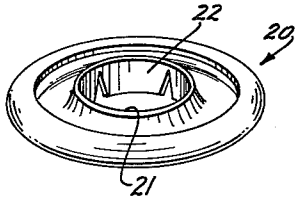


FIG. 2

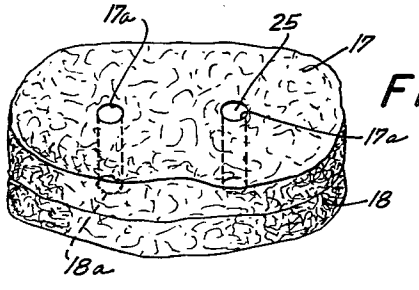


FIG. 3

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CLEANING IMPLEMENT

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The present invention relates to cleaning implements in general, and more particularly to a cleaning implement embodying a reusable handle which is especially suited for releasably holding an abrading device including one or more cleaning members, such as metallic scouring pads, sponges, mops, pieces of cloth, and like articles.

An important object of the invention is to provide a cleaning implement embodying a handle which is constructed and assembled in such a way that it may be readily separated from the article or articles which it is intended to support, which may be utilized for mounting different types of cleaning members or other articles, and which embodies means permitting rapid and convenient mounting or removal of one or more articles.

Another object of the invention is to provide a cleaning implement embodying a very simple and cheap handle of universal utility which comprises a small number of component parts and which may be rapidly connected with and separated from one or more articles in a very simple way so that it may be utilized by persons with little or no mechanical skill.

A further object of the invention is to provide a cleaning implement embodying a handle of the above outlined characteristics which may be manufactured in all sizes and which may be taken apart or assembled without requiring special tools for such operation.

The novel features which are considered as characteristic of the invention are set forth in particular in the appended claim. The invention itself, however, both as to its construction and its method of operation, together with additional objects and advantages thereof, will be best understood from the following detailed description of a specific embodiment when read in connection with the accompanying drawing, in which:

FIG. 1 is a side elevational view of a cleaning implement which embodies my invention, certain portions of the handle and the abrading device being shown in central section;

FIG. 2 is a larger-scale perspective view showing the outer side of a snap fastener which forms part of the handle shown in FIG. 1; and

FIG. 3 is a perspective view of an abrading device which is provided with means for facilitating convenient application thereof to the handle shown in FIG. 1.

Referring now in greater detail to the drawing, and first to FIG. 1, there is shown a cleaning implement which comprises a handle **11** including a handgrip portion consisting of a length of steel wire or the like and bent over itself to form two elongated arms **12, 13**, these arms being twisted about each other, as at **14**. The free end portions of arms **12, 13** are bent in mirror reverse into the shape of letters L and thereby define two parallel prongs **15, 16**, respectively. The prongs extend through an abrading device comprising a pair of readily penetrable compressible metallic scouring pads **17, 18**. The means for releasably securing the pads **17, 18** to the prongs **15, 16** comprises two snap fasteners **19, 20**, the latter of which is shown in greater detail in FIG. 2. Each snap fastener is formed with an aperture **21** whose diameter equals or slightly exceeds the maximum diameters of heads **23***a*, **24***a* respectively forming part of tubular members **23, 24** which are applied onto the prongs **15, 16**. Each snap fastener further comprises a resiliently yieldable slotted ring **22** which surrounds

the respective aperture **21** and whose sections engage with the respective head to prevent unintentional separation of the snap fasteners from the tubular members **23, 24**.

Prior to their connection with the prongs **15, 16**, the pads **17, 18** of the abrading device are preferably formed with spaced pairs of bores **17***a*, **18***a*, respectively. As shown in FIG. 3, these pads may be prefabricated with such bores and each pair of aligned bores **17***a*, **18***a* may receive a peg **25** which is expelled by the respective tubular member when the pads are applied to the handle **11**. When mounted on the handle, the outer side of the pad **18** bears against the outwardly bent portions or abutment means **26, 27** of the arms **12, 13** and/or against a special apertured abutment plate **28** which is mounted on the prongs inwardly of the tubular members **23, 24**. The outer side of the other pad **17** bears against the inner sides of the snap fasteners **19, 20** and the latter compress the median portions of both pads whereby the marginal portions of the pads are deformed over the snap fasteners and over the bent portions **26, 27**. This insures that the components of the handle **11** cannot come into contact with the surfaces of bodies which are cleaned by the pads **17** and **18**, i.e. the handle cannot leave scratch marks on the cleaned or polished surfaces.

When the user desires to remove the pads **17** and **18**, he merely slips the tip of a knife blade or other flat implement beneath the fasteners **19, 20** to remove the fasteners by application of comparatively small force such as is necessary to move the annuli **22** over the maximum-diameter central portions of the heads **23***a*, **24***a* and the user is then free to remove the scouring pads. A new set of pads, such as the one shown in FIG. 3, may be placed onto the handle merely by aligning the prongs **15, 16** with the pegs **24** and by expelling the pegs in their axial direction. The snap fasteners **19, 20** are secured to the heads **23***a*, **24***a* by exertion of a comparatively small pressure such as is necessary to move the split rings **22** in requisite position.

The tubular members or sleeves **23, 24** are press fitted or otherwise rigidly secured to the prongs **15, 16**, respectively. The provision of the compressing or abutment plate **28** is desirable when the bent portions **26, 27** do not extend at right angles to the prongs **15, 16** but enclose an obtuse angle therewith. The sleeves **23, 24** may be prefabricated of sheet metal or of suitable plastic material.

Of course, my invention is not limited to the exact construction which is shown in the drawing. In its simplest form, the handle may comprise a single prong, or one of the snap fasteners as well as the complementary head may be replaced by other types of readily separable retaining means.

It will be readily understood that the scouring pads **17, 18** represent but one form of an abrading device which may be mounted on the improved handle. For example, the pads may be replaced by suitably shaped sponges, by a mop which extends between the prongs **15, 16** and the bent portions **26, 27**, or by pieces of cloth. The important feature of the invention is that one or more prongs of the handle may be readily connected with releasable retaining means which hold in position an abrading device consisting of one or more throw-away articles. Thus, instead of being discarded with the articles when the latter outlive their usefulness, the handle may be readily separated from one set of articles and connected with another set in a very simple, rapid and convenient manner.

Without further analysis, the foregoing will so fully

reveal the gist of the present invention that others can, by applying current knowledge, readily adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic and specific aspects of this invention and, therefore, such adaptations should and are intended to be comprehended within the meaning and range of equivalence of the following claim.

What is claimed as new and desired to be secured by Letters Patent is:

A cleaning implement comprising, in combination, an abrading device consisting of penetrable material and having a compressible median portion and a marginal portion surrounding said median portion; and a handle comprising a handgrip portion, a pair of spaced substantially parallel prongs rigid with said handgrip portion, abutment means for the abrading device located intermediate said prongs and said handgrip portion, a tubular member mounted on each prong and extending through the median portion of said abrading device, each tubular member having a substantially spherical head projecting beyond the median portion of the abrading device, and snap fastener means releasably connected to each head for retaining the abrading device on the tubular members between said abutment means and said heads, the length of said prongs being less than the thickness of the median portion of said abrading device in uncompressed condition of said median portion whereby said median portion is compressed upon application of said snap fastener means to the heads of said tubular members and the marginal portion of the abrading device extends beyond and conceals the snap fastener means.

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