Oct. 28, 1958 W. RYMPALSKI 2,857,610

MESH SCRUBBING PAD AND METHOD OF MANUFACTURE

Filed March 31, 1955

Fig. 1.

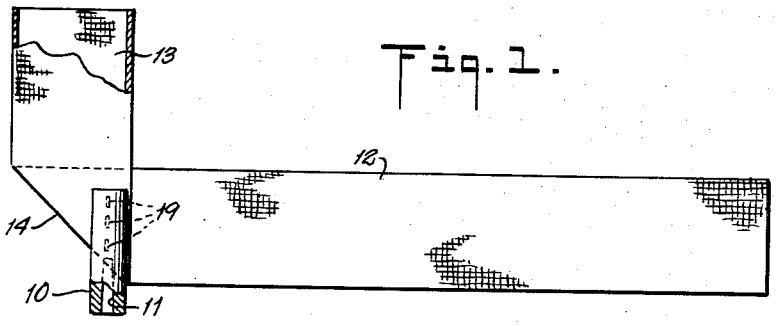


Fig. 2.

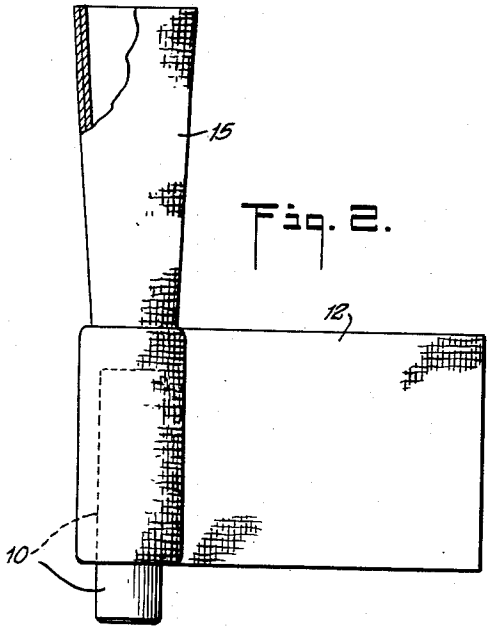


Fig. 3.

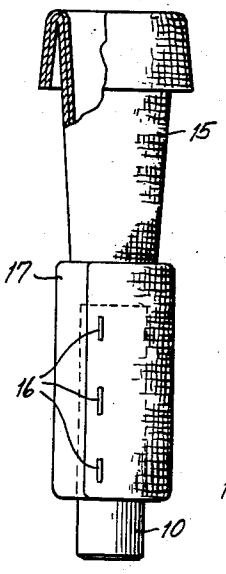


Fig. 4.

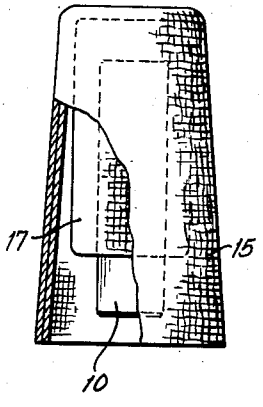


Fig. 5.

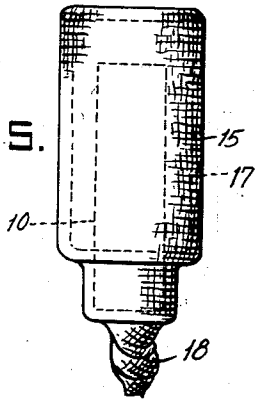
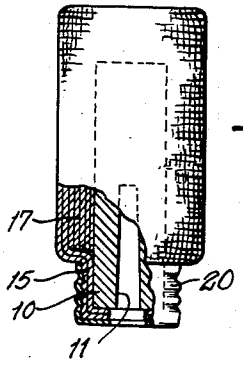


Fig. 6



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MESH SCRUBBING PAD AND METHOD OF MANUFACTURE

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Application March 31, 1955, Serial No. 498,216

9 Claims. (Cl. 15—209)

The present invention relates to a mesh scrubbing pad and particularly to such a pad which is cylindrical in form and adapted for use with the electrically driven utensil scrubbing device disclosed in the copending application of Paul H. Odessey, Serial No. 498,215, filed March 3, 1955, and assigned to the same assignee.

More particularly still the invention relates to a pad which is cylindrical in form having a wooden interior adapted for mounting upon a shaft or handle and to the method for forming such a pad.

It is an object of the invention to provide a cylindrical mesh cleaning pad for general use in scrubbing or cleaning and particularly suited to the scrubbing of kitchen utensils such as pots, pans, oven gratings, etc.

It is another object of the invention to provide such a cleaning pad having a wooden core member adapted to be readily mounted upon a shaft or handle.

It is a further object of the invention to provide a method of forming such a cylindrical mesh pad from a seamless cylindrical wire mesh strip.

It is a further object of the invention to provide a cleaning pad formed of seamless cylindrical wire mesh strip with the mesh strip arranged so that a portion of the strip envelops the pad to provide a seamless pad of simple construction.

It is a still further object of the present invention to provide a cleaning pad of the foregoing type which is assembled using a single piece of mesh strip and is accordingly of very simple and inexpensive construction.

Other objects and features of the invention will be apparent when the following description is considered in connection with the annexed drawings, in which,

Figure 1 is a top plan view illustrating the first step in the formation of a cylindrical scrubbing pad from a seamless tubular strip of metallic mesh fabric;

Figure 2 is a top plan view illustrating the formation of the scrubbing pad particularly after the mesh strip has been rolled upon a dowel; and

Figures 3 through 6 show the successive steps in the formation of the scrubbing or cleaning pad.

Referring now to the drawings, there is shown at **10** a dowel, preferably of wood, which is provided with the bore **11** which is tapered longitudinally and is preferably rectangular in cross-section. This dowel **10** is positioned upon a strip **12** of metallic mesh fabric which is prepared in seamless tubular form as is indicated at **13** where the forward portion of the fabric has been broken away to show the underlying layer. The fabric **12** is positioned as shown in Figure 1 being folded along the line **14** at a 45° angle thus causing the two portions of the fabric to extend at right angles to one another. The dowel **10** previously described is laid upon the fabric **12** adjacent the base of the angle formed by the fold line **14** with a portion of the dowel protruding beyond the lower edge of the horizontal portion of the fabric **12** and is fastened to the fabric **12** by any suitable means such as the staples **19**.

The horizontal portion of the fabric **12** is then wrapped about the dowel in the manner illustrated in Figure 2 forming a cylinder of mesh fabric having the wooden dowel **10** at the center thereof forming a core. At this stage the vertical portion **15** of the fabric is also wrapped about the dowel and extends beyond the dowel and the cylindrical pad thus far formed from the horizontal portion.

Next the winding of the fabric upon the core is completed as seen in Figure 3 and the fabric is fixed to the core by any suitable means as for example by means of the staples **16**. As is also shown in Figure 3 the portion **15** of the tubular mesh fabric is folded downwardly and as is shown in Figure 4 this folding continues until the end of the portion **15** has been brought down around the formed pad (as shown at **17** in Figures 3 and 4) and into position such that the lower end thereof lies beneath the lower end of the dowel **10**.

The lower end of the protruding fabric portion **15** is then twisted so that the outer covering formed by this portion **15** is tight over the inner portion **17** of the pad. The pad at this stage is shown in Figure 5.

Thereafter the lower twisted portion **18** of the fabric **15** is cut off and a ferrule **20** is placed over the dowel **10** and that portion of the outer layer **15** extending below the main pad **17**, and is crimped into position thus holding the entire metallic mesh fabric in position on the dowel. The pad as thus completed may be mounted upon a handle having a tapered rectangular point or may preferably be placed upon the shaft of the electrically driven scrubbing device of the copending application above-mentioned.

The mesh fabric may be of any suitable material, for example copper, steel, either stainless or otherwise, and like materials, or may in some instances be formed of plastic materials. By the method of this invention a scrubbing pad which is compacted to a desirable degree and which is held in place by an integral outer layer is readily formed without the use of expensive or complicated machinery.

While I have described a preferred embodiment of the invention, it will be understood that I wish to be limited not by the foregoing description, but solely by the claims granted to me.

What is claimed is:

1. A scrub pad comprising in combination, a cylindrical core, a first portion of seamless mesh tubing in flat condition having a section thereof fixed to said core and its longitudinal axis parallel to the axis of said cylindrical core, a second seamless mesh tubing portion in flat condition having its longitudinal axis perpendicular to the said core axis and cylindrically encircling said core, said first portion being folded over to envelop said second portion and core, and means fixing said first portion to said core at the end opposite said fold, thereby holding said cylindrically wrapped second portion on said core.

2. A scrubbing pad as claimed in claim 1, characterized in that said first and second portions of said strip of seamless mesh material are folded along a line extending at 45° to the axis of said core.

3. A scrubbing pad as claimed in claim 1, characterized in that said seamless mesh tubing is made of metallic wire.

4. A scrubbing pad as claimed in claim 1, characterized in that said fixing means comprises a ferrule crimped over said end opposite said fold and said core.

5. A scrubbing pad as claimed in claim 1, characterized in that said core has a concentric tapered bore therein, said bore being adapted to receive an operating member.

6. A scrubbing pad as claimed in claim 5, character-

ized in that said tapered bore is rectangular in cross-section and further characterized in that a ferrule is crimped over said free end of said first strip portion, said ferrule having a central rectangular opening therein in alignment with said tapered bore.

7. The method of making a scrubbing pad which comprises a first portion of seamless mesh tubing in flat condition having a length slightly greater than twice the width of said tubing, fixed to a cylindrical core, of substantially the width of the collapsed tubing, adjacent an edge of said tubing, said core having its longitudinal axis parallel to the longitudinal axis of said first portion of seamless mesh tubing, a second seamless mesh tubing portion substantially longer than the said first portion fixed to said cylindrical core adjacent an edge of said second portion, said second portion having its longitudinal axis perpendicular to the longitudinal axis of said core, comprising the steps of wrapping said first and second portions of seamless mesh tubing spirally about said core, folding the extending end of said first portion downwardly about said second spirally wound portion so as to encompass said second portion, twisting the free end of the folded first portion to entirely encompass the adjacent core end, cutting said twisted end in the plane of the core end and fixing said cut end to said core.

8. The method of making a scrubbing pad as claimed in claim 7 characterized in that the first and second portions of seamless mesh tubing are formed from a single strip of collapsed seamless mesh tubing by placing a 45° fold adjacent one end thereof providing two portions of tubing extending at right angles to each other, one of said portions having a length slightly greater than the width of the collapsed tubing, the other portion being substatially longer.

9. The method of making a scrubbing pad which comprises a first portion of seamless mesh tubing in flat condition having a length slightly greater than twice the width of said tubing, fixed to a cylindrical core, of substantially the width of the collapsed tubing, adjacent an edge of said tubing, said core having its longitudinal axis parallel to the longitudinal axis of said first portion of seamless mesh tubing, a second seamless mesh tubing portion substantially longer than the said first portion fixed to said cylindrical core adjacent an edge of said second portion, said second portion having its longitudinal axis perpendicular to the longitudinal axis of said core, comprising the steps of wrapping said first and second portions of seamless mesh tubing spirally about said core, folding the extending end of said first portion downwardly about said second spirally wound portion so as to encompass said second portion, twisting the free end of the folded first portion to entirely encompass the adjacent core end, cutting said twisted end in the plane of the core end, placing a ferrule over the end of said core and said twisted seamless mesh tubing end and crimping said ferrule to said core.

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