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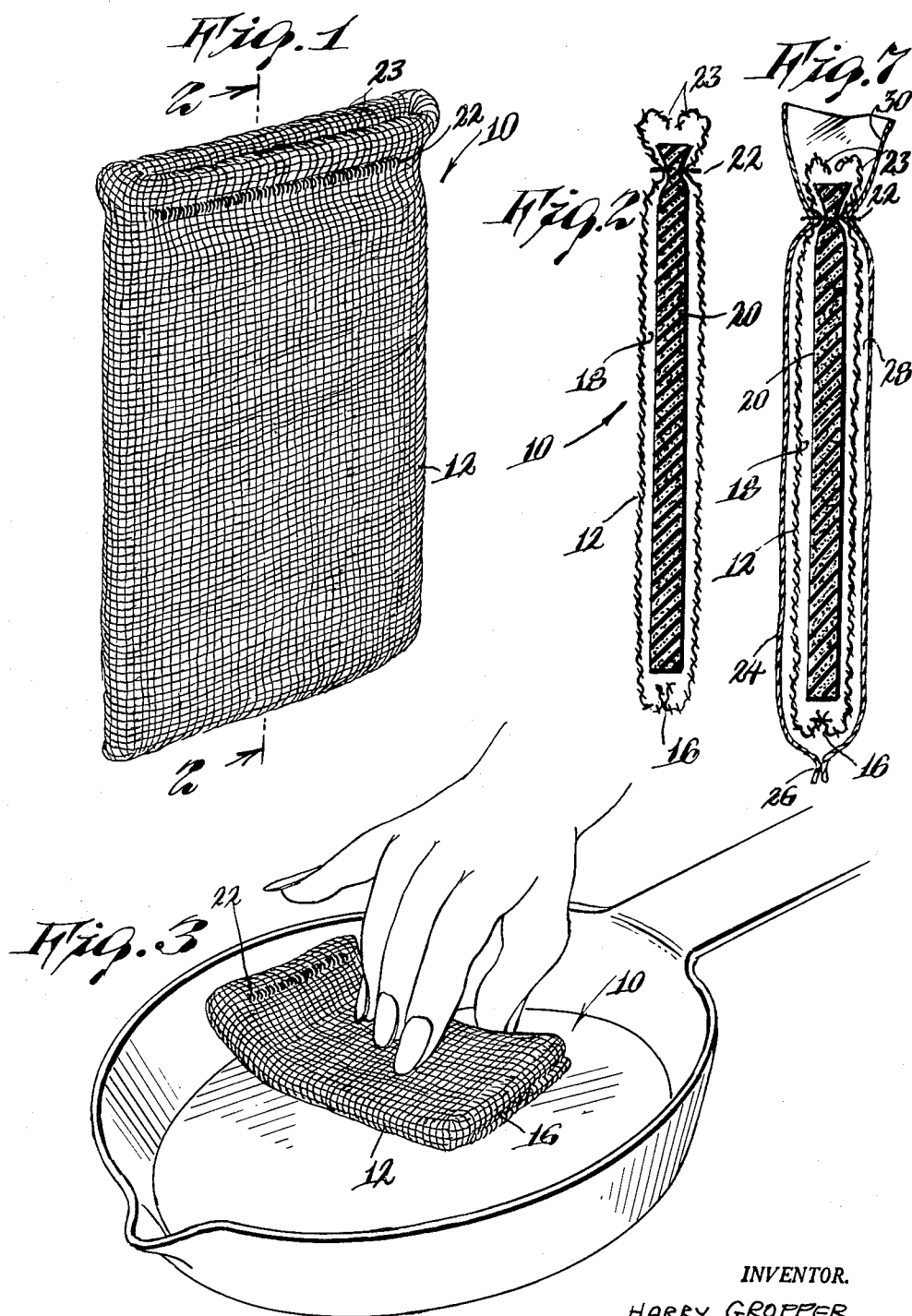
H. GROPPER

3,252,176

DETERGENT PAD

Filed Feb. 4, 1960

2 Sheets-Sheet 1



INVENTOR.
HARRY GROPPER
BY *Kenneth C. Knecht*
ATTORNEY

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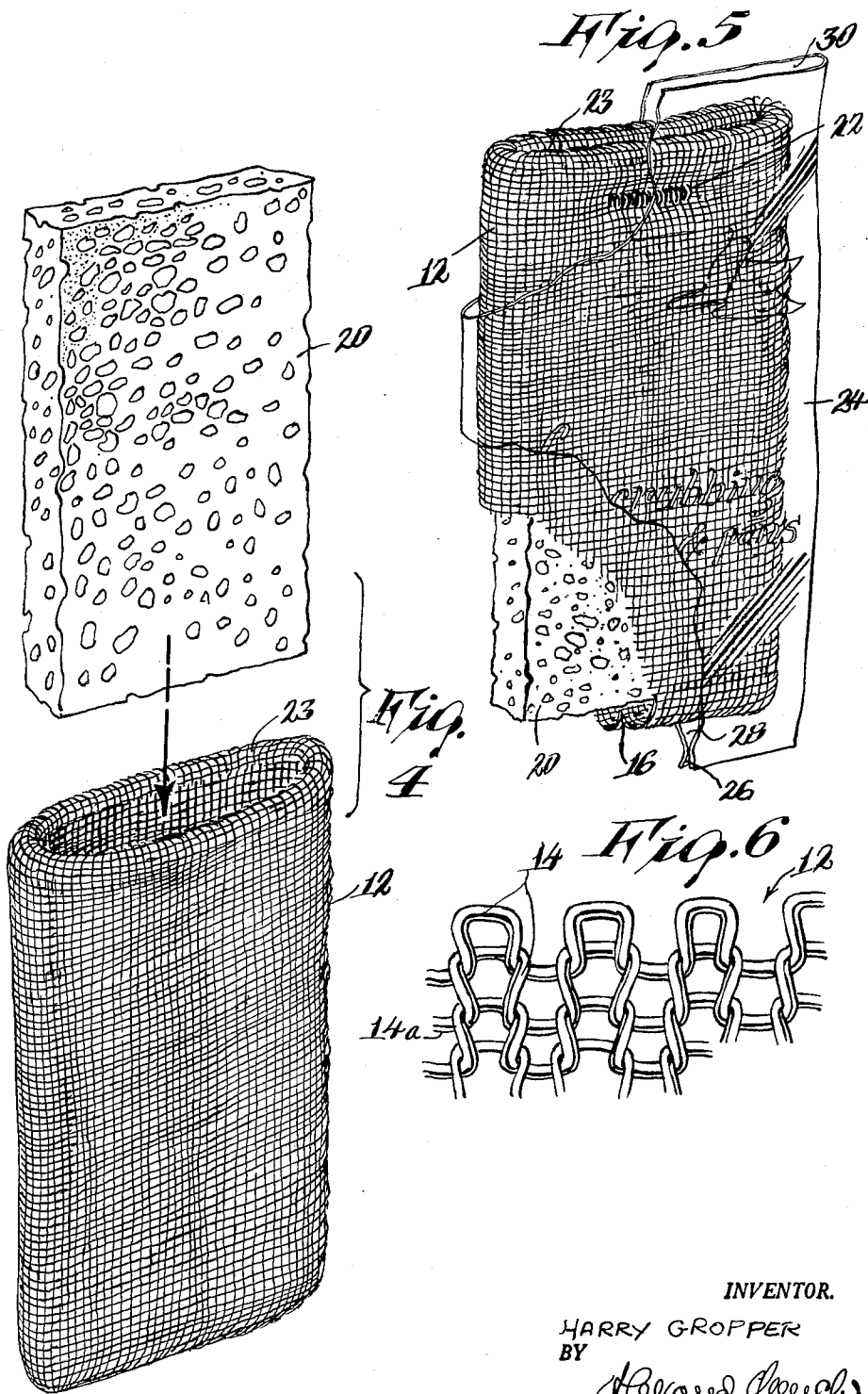
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2 Sheets-Sheet 2



INVENTOR.

HARRY GROPPER
BY

Harold Knecht
ATTORNEY

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DETERGENT PAD

Harry Gropper, New York, N.Y.; Alex Gropper and Aaron M. Diamond, executors of Harry Gropper, deceased, assignors, by mesne assignments, to The Dow Chemical Company, Midland, Mich., a corporation of Delaware

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6 Claims. (Cl. 15-209)

This invention relates to cleansing devices and, more particularly, to a self contained scouring pad, and is a continuation-in-part of application serial No. 621,854 filed November 13, 1956, now abandoned.

Ordinarily, it is difficult to remove food remnants from frying pans and pots. In some instances, soap of cleanser is used in conjunction with steel wool, sponges, or the like for this purpose. However, such methods are usually uncomfortable to the hands, inefficient, and in many cases ineffective. It is therefore an object of the present invention to providing a scouring pad assembly which is extremely simple in construction, efficient in use, and which will overcome the aforementioned difficulties.

Another object of the present invention is to provide a scouring pad having a porous main body portion enclosed within a flexible cover having an exterior friction surface for dislodging food particles from cooking utensils, in which the porous main body portion effectively retains soap and suds for distribution through the porous cover which mechanically dislodges such food particles from the utensils.

Still an additional object of the present invention is to provide a scouring pad assembly of the type described in which the cover of the porous main body portion protects the softer main body portion from wear, and allows for the free flow of liquid and soap there-through at all times.

Still another object of the present invention is to provide a scouring pad package having a main body portion enclosed within a cover of the type described, which scouring pad unit is further enclosed within a protective container which will protect the friction surface of the scouring pad cover until ready for use.

A further object of the present invention is to provide a scouring pad package of the above type in which anchor means integrally secures a cover in enclosing relationship with the porous main body portion, and such anchor means further releasably secures the protective container in enclosing engagement with the main body portion and cover.

All of the foregoing and still further objects and advantages of this invention will become apparent from a study of the following specification, taken in connection with the accompanying drawing, wherein:

FIGURE 1 is a perspective view of a scouring pad assembly made in accordance with the present invention ready for use;

FIGURE 2 is a longitudinal cross sectional view taken along line 2-2 of FIGURE 1;

FIGURE 3 is a perspective view of the assembly shown in FIGURE 1 in actual use;

FIGURE 4 is an exploded perspective view of the component parts of the assembly shown in FIGURE 1;

FIGURE 5 is a perspective view, with parts broken away, illustrating a scouring pad package made in accordance with the present invention prior to actual use thereof;

FIGURE 6 is an enlarged fragmentary plan view showing the knitting stitch used in the manufacture of the cover member forming a part of the present invention; and

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FIGURE 7 is a longitudinal cross sectional view of the scouring pad package shown in FIGURE 5.

Referring now to the drawing and more particularly to FIGURES 1 to 4 thereof, a scouring pad assembly 10 made in accordance with the present invention is shown to include a flexible walled cover member 12 consisting of a plurality of rows of knitted stitches 14, of cut Mylar film material, each of which defines an outwardly facing friction edge for dislodging food particles from cooking utensils. This cover member 12 is preferably constructed from strands of self supporting plastic material which are non-absorbent, long lasting, and relatively stiff so as to define a friction surface for dislodging such food particles in the manner described.

The cover member 12 is generally in the form of a sleeve having one end turned inwardly and sealed to define a seam 16 with an interior compartment 18. A flexible porous member 20, such as a natural or synthetic sponge, substantially fills the interior 18 of the cover 12 and is anchored therewithin by means of stitches 22 which extend through the opposite sides of the cover member 12 and the end of the porous member 20 opposite from the closed end seam 16 of the cover 12. The adjacent end of the cover member 12 forms an inwardly directed bead 23 so as to prevent irritation to the hands during use.

The stitching 22 is also used to releasably secure a protective covering 24 upon the assembled main body portion 20 and cover 12. This protective covering 24 is also in the form of a sleeve having an interior compartment 28 within which the scouring pad assembly is received. One end of the protective covering, is provided with a seam 26, whereas the opposite end thereof defines an opening 30 to which the scouring pad assembly is inserted. The stitching 22 is applied to the unit after it is inserted into the protective covering sleeve 24, thus at least temporarily integrally uniting the protective covering with the cover 12 and main body portion 20.

Since the protective covering 24 is preferably of a frangible material, such may be readily torn from the stitching 22 and the enclosed scouring pad assembly without effecting the stitching 22 so as to permanently maintain the main body portion and cover in the assembled relationship. The protective covering also prevents any unnecessary wear upon the friction edges of the cover member 12, so as to prolong the effective life thereof during use.

It will now be recognized that the porous main body portion 20 will effectively retain suds and soap for distribution through the porous cover 12 while the exterior friction surface thereof is used to remove or scour particles of food from the cooking utensils, in the manner shown in FIGURE 3. The porous main body portion 20 also provides body for the friction surface cover 12 to facilitate the handling and use thereof at all times.

Since both the main body portion 20 and cover 12 are of porous construction, the scouring pad assembly may be readily cleaned and dried with a minimum amount of effort.

It is understood that the scouring pad package above described may be used for purposes other than that of dislodging food particles from cooking utensils. In dry or cleaning-fluid or detergent-impregnated form, the cover member 12, being given support by porous member or sponge 20, may be used as an abrasive and/or cleaning pad for any and all suitable purposes since the cover member 12 is knitted or woven from "Mylar" yarn as set forth in U.S. pending application Ser. No. 621,854 filed on November 13, 1956; this application being a continuation-in-part of said copending application.

As was stated in the specification and shown in the drawings of Ser. No. 621,854, the yarn of the fabric is

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composed of a monofilament of plastic preferably Mylar and has "nylon" or other fibrous yarn fed therewith to give the finished texture or weave more body. The Mylar yarn as a ribbon is shown in applicant's FIG. 6 by knit stitches 14 and the nylon fibrous or twisted yarn is indicated by numeral 14a. And as was further stated and shown in Ser. No. 621,854, Mylar yarns presently available and as used herein are formed by slicing or cutting Mylar sheet stock into thin strips having a rectangular or square cross-section. Such a yarn because of the corners of said rectangular or square cross-sections and also because of the roughness frequently accompanying Mylar yarns is excellently suited to any application involving frequent abrasion such as is encountered in the scouring and abrasive pads hereinabove referred to.

While this invention has been described with particular reference to the construction shown in the drawing, it is to be understood that such is not to be construed as imparting limitations upon the invention, which is best defined by the claims appended hereto.

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

1. A yieldable, compact, unitary, resilient, pervious and flexible abrading pad, comprising a pervious main core body and a pervious, non-slidable abrasive and frictionally adhering sleeve therefor, said core body being of resilient, porous and normally self shape-maintaining plastic, and said sleeve being of a tubular knitted fabric, the yarn thereof including cut edge strips of tough and resilient Mylar film having reexposable and abrading edges, the said fabric having resilient deformability, and said sleeve assuming the shape of and adhering to the walls of the core, said sleeve being closed at one end.

2. An abrading pad as set forth in claim 1 wherein the sleeve is secured at the other end to said core.

3. An abrading pad as set forth in claim 1 wherein

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said yarn includes non-abrasive and synthetic fibrous yarn disposed adjacent said strips whereby characteristics of increased strength, more softness and body are imparted to the fabric.

4. A knitted abrasive and pervious fabric comprised of yarn including cut edge strips of tough and resilient Mylar film having abrading edges to give said fabric resilient deformability and discontinuous and reexposable abrading edges.

5. A knitted fabric as set forth in claim 4 wherein said yarn includes non-abrasive and synthetic fibrous yarn disposed adjacent said strips whereby characteristics of increased strength, more softness and body are imparted to the fabric.

6. A scouring pad comprising cut edge strips of polyethylene terephthalate film knit as a yarn into a fabric, said fabric being formed into a pouch for receiving a filler, said strips comprising portions presenting cut edges at the exterior of the pouch for contact with solid surfaces over which said fabric is drawn in sliding contact.

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CHARLES A. WILLMUTH, *Primary Examiner*.

WALTER A. SCHEEL, MARTIN D. KANOWITZ,
LEON G. MACHLIN, *Assistant Examiners*.