April 4, 1939. R. B. KINGMAN 2,152,697

SCOURING AND CLEANING IMPLEMENT

Filed Oct. 22, 1936

Fig. 1

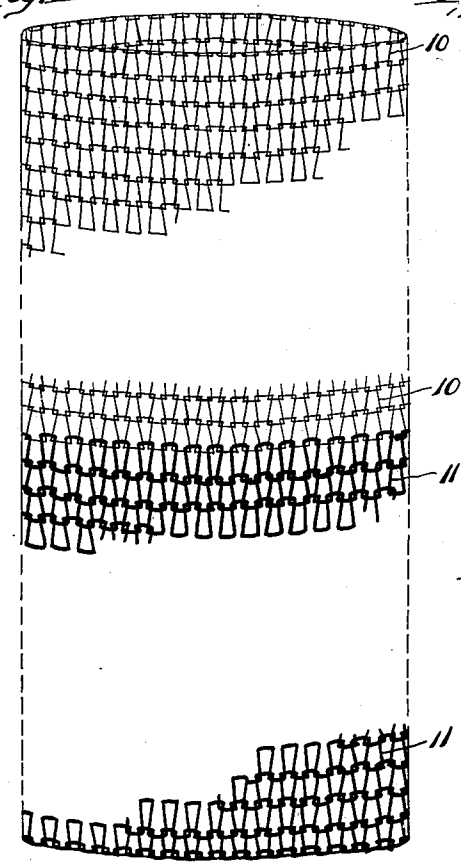


Fig. 2

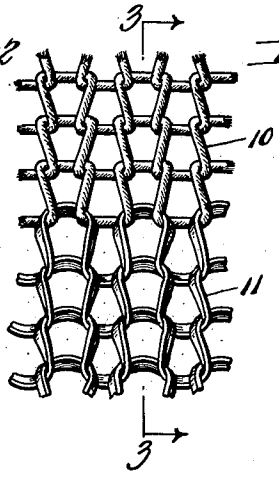


Fig. 3



Fig. 4

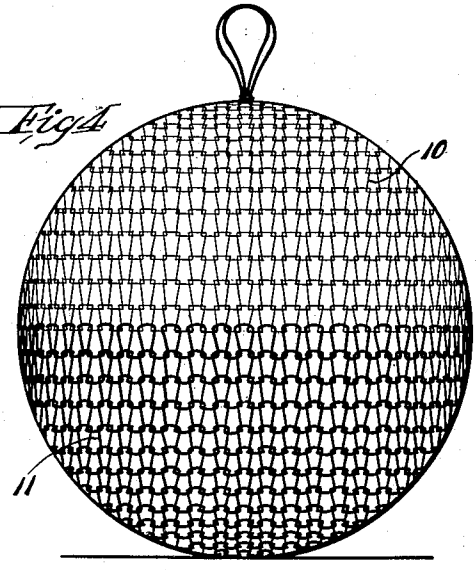
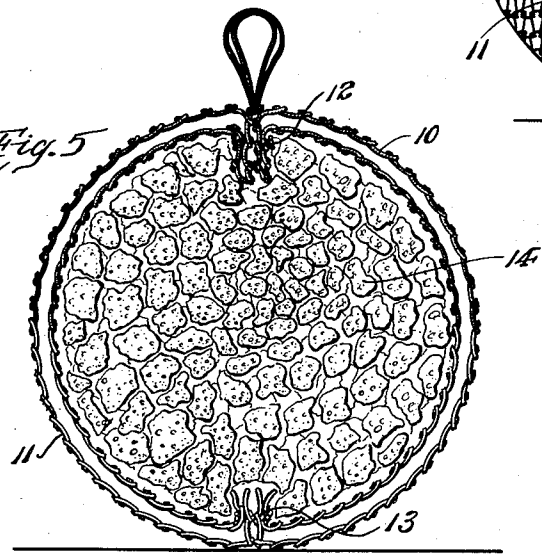


Fig. 5



INVENTOR.
Russell B. Kingman,
BY
Geo. S. Richards
ATTORNEY.

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SCOURING AND CLEANING IMPLEMENT

Russell B. Kingman, Orange, N. J., assignor to Metal Textile Corporation, West Orange, N. J., a corporation of Delaware

Application October 22, 1936, Serial No. 106,998

1 Claim. (Cl. 15—209)

This invention relates to improvements in scouring implements; and the invention has reference, more particularly, to a novel construction of hand implement useful to effect scouring or scraping operations in conjunction with cleansing liquids for the cleaning of surfaces generally; the device being especially useful as an implement for scouring and cleaning kitchen and household utensils.

The invention has for an object to provide a novel scouring and cleaning implement comprising a central core mass, preferably consisting of liquid absorbent material, upon which is superimposed an outer enveloping mesh cover; one portion of said cover being made of a hard non-absorbent material adapted to produce, when rubbed across a surface to be treated, an abrasive or scraping effect, and another portion of said cover being made of a soft absorbent material adapted to produce a wiping or cleansing effect when rubbed across the surface under treatment.

The invention has for a further object to provide a device, as above generally characterized, wherein the central core mass consists of an agglomeration of pieces of natural or artificial sponge material which will take up and hold a cleansing liquid subject to expression therefrom through the mesh cover onto the surface under treatment and into the path of movement of the device as rubbed upon and over said surface.

Other objects of this invention, not at this time more particularly enumerated, will be understood from the following detailed description of the same.

An illustrative embodiment of the invention is shown in the accompanying drawing, in which:

Fig. 1 is a face view of a sleeve of knitted material from which the enveloping mesh cover of the device is made; Fig. 2 is an enlarged detail face view of a portion of said knitted material, and Fig. 3 is a longitudinal section therethrough, taken on line 3—3 in Fig. 2.

Fig. 4 is an elevational view of the complete scouring and cleansing implement according to this invention, and Fig. 5 is a vertical sectional view through the same.

Similar characters of reference are employed in said views, to indicate corresponding parts.

The cover material for the implement of this invention comprises, preferably, a knitted fabric. This fabric is initially produced in the form of a tubular knit seamless body or sleeve, which is knitted from two characteristically different kinds of material. One of these materials consists of a vegetable yarn, such, e. g., as cotton yarn, which is soft and absorbent. The other material consists of a metallic strand or wire, preferably of flat ribbon-like form, and preferably made of a non-corrosive metal, such, e. g., as copper, zinc., aluminum, or the like. In utilizing these materials to knit the tubular body or sleeve; one material, viz. the vegetable or cotton yarn is first knitted to produce a soft absorbent sleeve section 10, the knitting then being continued with the other material, viz. the metallic ribbon-like wire, to produce a hard non-absorbent sleeve section 11, whereby a tubular body or sleeve of suitable length is produced, one end portion of which comprises a soft absorbent mesh body and the other adjoined end portion of which comprises a hard non-absorbent mesh body, as shown in Fig. 1.

The tubular body or sleeve, characterized as above set forth, is so folded upon itself as to produce a hollow envelope, the respective ends 12 and 13 of which are gathered together and suitably secured or tied so as to close said ends, and thus produce a more or less spherical body, one half or hemisphere of which is constituted by the soft absorbent mesh 10 and the other half or hemisphere by the hard non-absorbent mesh 11. The cover may comprise one or more plies of the knitted material, and preferably is of two-ply construction.

After one end of the cover member is closed and before the other and remaining end thereof is closed, the interior is filled with the core mass 14. This core mass may be in one-piece of absorbent material of suitable character if desired, but preferably it consists of an agglomeration of small pieces of such absorbent material, and preferably of either natural or artificial sponge.

The knitted loops of ribbon-like metallic material making up the hard non-absorbent portion of the cover present, in use a multiplicity of sharp scraping edges which effect a desired scraping or abrading action when the device is rubbed over a surface to be cleaned. This scraping or abrading action is further facilitated when the core mass of the device is saturated with cleaning liquid, such as soapy water for example, since the pressure of the device against the surface being treated tends to express this cleaning liquid upon any dirt, scale or encrustations adhering to the surface with softening effect thereupon, so that dislodgement thereof by the abrasive or scraping effects is facilitated. The soft absorbent portion of the mesh cover, constituted by the cotton or other vegetable yarn, also absorbs the cleaning liquid, so that as this portion of the cover is

rubbed over the surface under treatment the loosened dirt, etc., is further dissolved and wiped away and eventual thorough cleaning and polishing of said surface is assured.

From the above it will be understood that a very simple and yet exceedingly efficient combined scouring and cleansing implement is afforded by the present invention. In addition to this, the resilient or compressible character of the device as a whole assures application of a considerable area of the cover member selectively to the work, in various ways, that is at times all metal contact, at other times all yarn contact, or at times both metal and yarn simultaneously, while at the same time conformation of the contacting portion to the contours of the surface treated is easily attained. Furthermore, the resilient character of the device as a whole makes the same comfortable to the hand of the user.

I am aware that some changes could be made and possibly different embodiments of the invention could be made without departing from the scope thereof, as defined in the appended claim. It is consequently intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

I claim:

An implement for the purposes described comprising, a substantially hemispherical cover section consisting of a plurality of plies of flexible mesh fabric knitted from ribbon-like metallic wire whereby said cover section provides a relatively hard and non-absorbent abrasive area, and a second substantially hemispherical cover section consisting of a plurality of plies of flexible mesh fabric knitted from vegetable yarn whereby said second section provides a relatively soft and absorbent non-abrasive area, said sections being joined to form a substantially spherical unitary cover body, and a fluid absorbent filler mass enclosed within said cover body consisting of a multiplicity of pieces of spongy material.

RUSSELL B. KINGMAN.