March 20, 1928.

1,663,132

R. B. KINGMAN

SCOURING DEVICE

Filed Jan. 21, 1925

2 Sheets-Sheet 1

Fig. 1

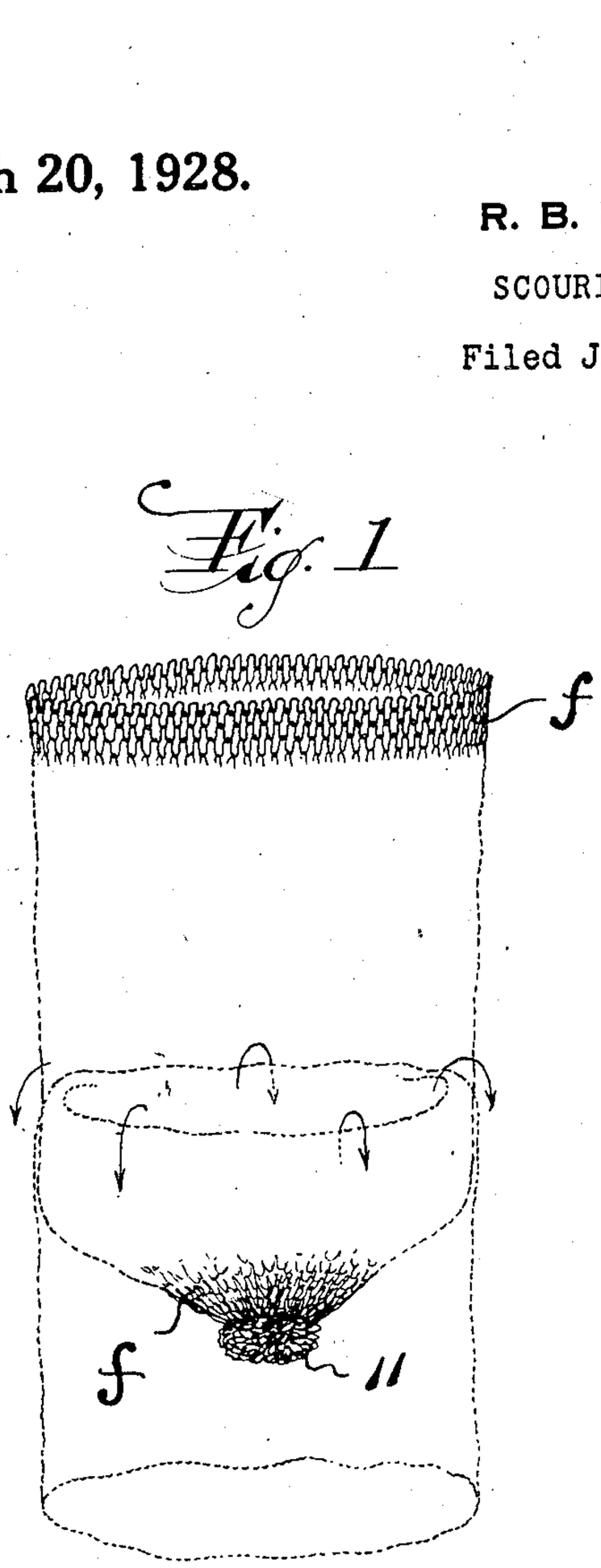


Fig. 2

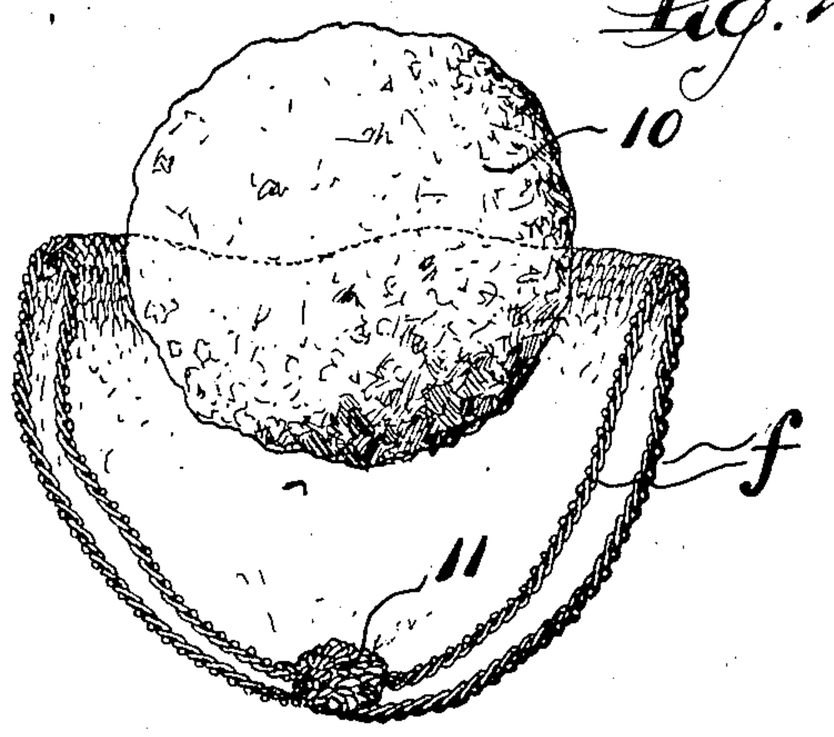
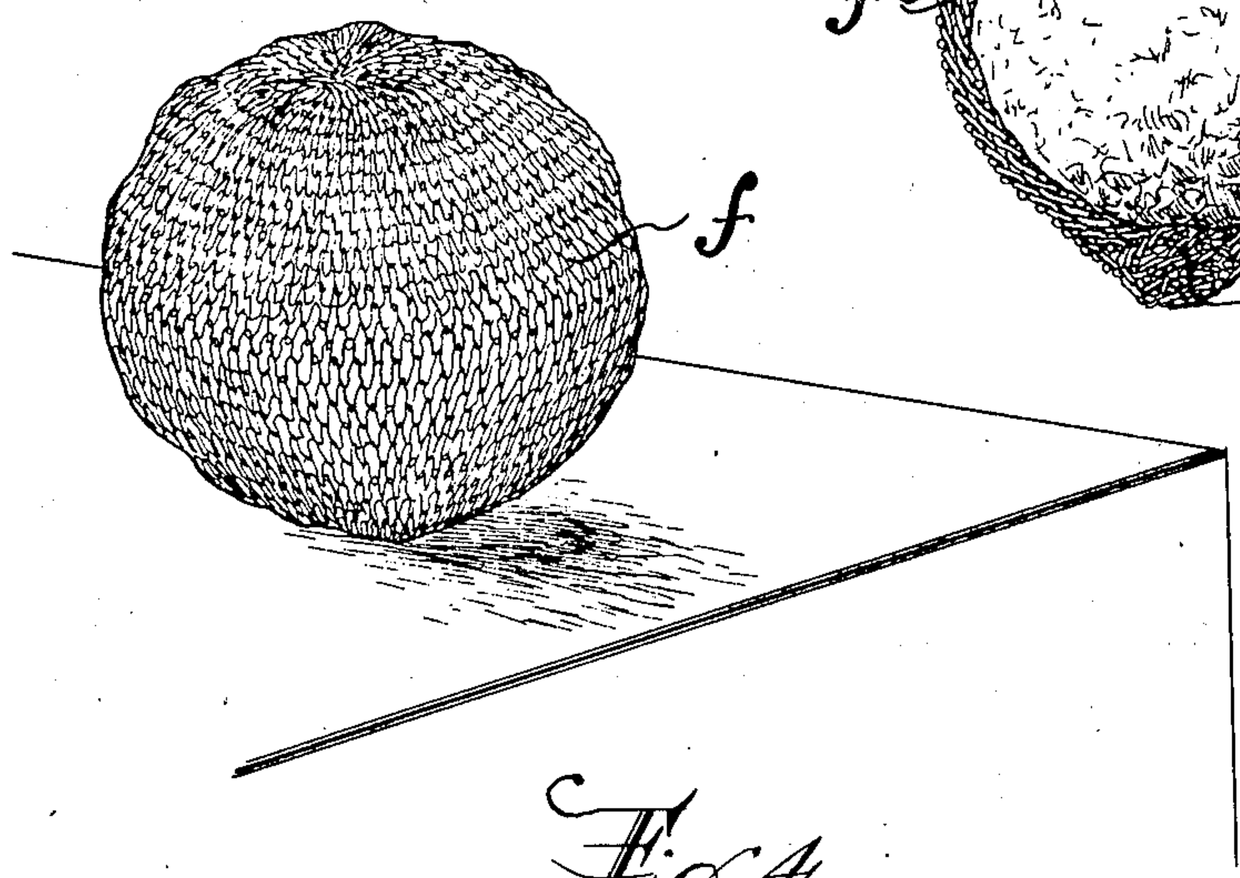


Fig. 3

Fig. 4



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Fig. 5

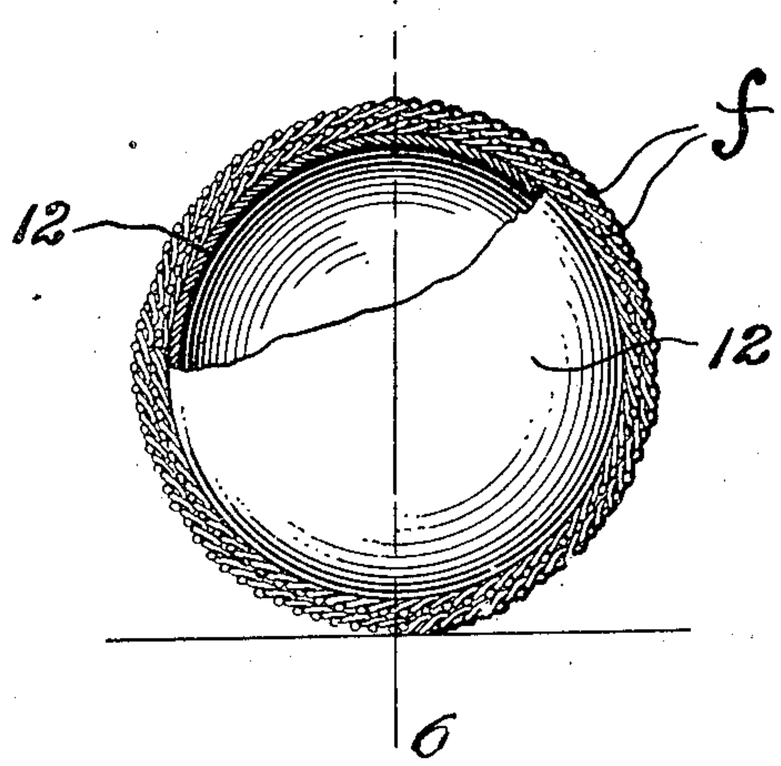
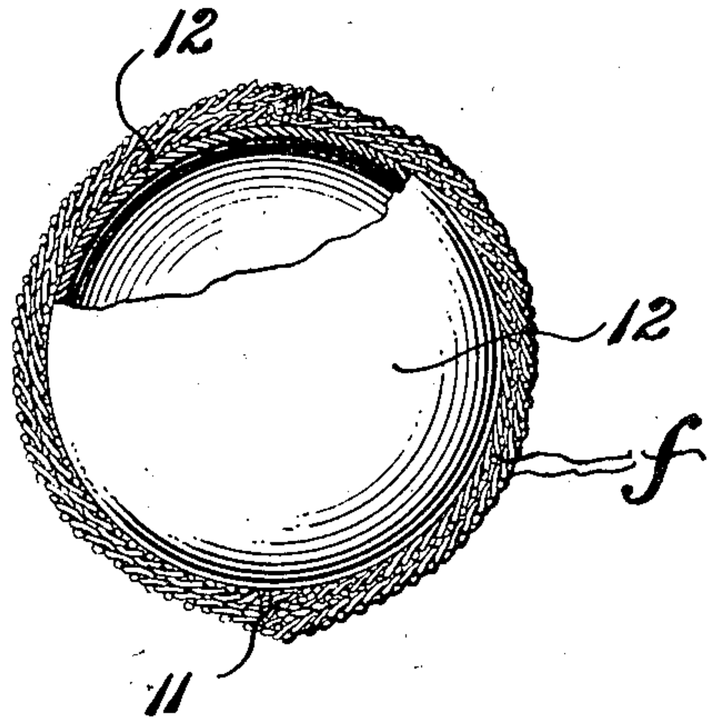


Fig. 6



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UNITED STATES PATENT OFFICE.

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SCOURING DEVICE.

Application filed January 21, 1925. Serial No. 3,740.

This invention relates, generally, to an improved scouring device; and the invention has reference, more particularly, to a novel construction of hand implement or device especially adapted for use as a kitchen and household aid for cleansing and brightening surfaces which require the application of abrasive action thereto, such, for example, as kitchen utensils and the like, metal surfaces, etc.

The invention has for its principal object to provide a novel construction or form of device comprising a center core or supporting element of suitable material enveloped in a splinterless metallic fabric cover; the latter being adapted to effect the desired abrasive action when the device is applied to and rubbed upon the surface to be cleaned or scoured, and the center core being adapted to provide a suitable backing or support for the abrasive fabric. The novel scouring device thus characterized will provide a very durable, strong and efficient structure which may be subjected to considerable rough usage without loss of shape or efficiency.

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

The invention is clearly illustrated in the accompanying drawings, in which:—

Fig. 1 is a diagrammatic view illustrating the preparation of an abrasive fabric to form the outer cover of the device; Fig. 2 is a diagrammatic view, showing the manner of applying the abrasive fabric cover to the center core or supporting element; Fig. 3 is a vertical section of the completed scouring device, with the center core or supporting element shown in elevation; and Fig. 4 is a perspective view of the completed scouring device.

Fig. 5 is a part vertical section and part elevation of a modified form of center core or supporting element, enveloped in the abrasive fabric cover, the latter being shown in section; and Fig. 6 is a similar sectional view, taken on line 6—6 in Fig. 5.

Similar characters of reference are employed in all of the hereinabove described views, to indicate corresponding parts.

Referring now to Figs. 1 to 4 inclusive of the accompanying drawings, the reference character 10 indicates one form of the center core or supporting element of my novel scouring device. This form of center core or supporting element consists of a preferably spheroidal mass of resilient material, such as rubber. Where a maximum of resiliency or elasticity in the center core or supporting element is desired, together with the ability to soak up and hold water or other cleansing fluid, I may employ a material such as sponge-rubber, which is both highly resilient and porous.

The abrasive fabric covering with which the center core or supporting element 10 is enveloped, preferably comprises a metallic fabric *f*, initially produced as a tubular knit seamless body, or otherwise woven fabric joined into the desired initial tubular form by a seam. The fabric may be all metal, that is one formed entirely from metallic material, preferably of a non-corrosive metal, such as copper, and preferably formed from thin ribbon-like or flat wire, although other cross-sectional shapes of wire may be employed; or the fabric may be made of vegetable yarn and metal in any suitable manner to produce an abrasive fabric of composite character.

The abrasive fabric *f* may be applied around the surface of the center core or supporting element 10 and suitably secured in place by any means or in any manner found convenient or desirable. The abrasive fabric cover thus produced and applied upon the center core or supporting element may consist of one or more plies or thicknesses of fabric. I would recommend, however, a two-ply abrasive fabric cover, as adapted to give long life as well as a heavy body of abrasive mass, and I have therefore illustrated, in Figs. 1 to 4 inclusive of the drawings, the manner of forming and applying such two-ply abrasive fabric cover. To this end I take a suitable length of tubular abrasive fabric *f*, and then turn the same back upon itself to double the same, as shown in Fig. 1. I then gather together and fasten the free doubled ends of the fabric, as at 11, in Fig. 1, whereupon I turn the two-ply body inside out, thus producing a bag-like member, such as shown in Fig. 2, into the interior of which I insert the center or supporting element 10. After the center core or supporting element is placed within said bag-like member, I thereupon gather the open end of the latter together to close the same over the center core or supporting ele-

ment 10, suitably fastening the gathered edges together by wire stitching or any other convenient form of fastening means, thus completing the scouring device.

As will be understood from an inspection of the drawings, the center core or supporting element 10 yieldably backs the abrasive fabric *f* at all points, thus not only affording a device which can be readily and easily grasped and retained by the hand in use, but also providing in use an adequate support for the abrasive fabric to firmly press the same against the surface to be scoured or cleansed. The device with the novel center core or supporting element 10 is itself easily cleansed of accumulations of dirt, grease and the like, and can thus be kept in desired sanitary condition.

Referring now to Figs. 5 and 6, I have shown a modified form of my novel scouring device, substantially the same in form and construction as that already above described, except that in the place of the soft solid rubber or sponge-rubber center core, I have substituted a hollow air inflated rubber ball 12, which provides a satisfactory backing and support for the abrasive fabric cover, and therefore affords a form of my novel device, which in essentials is equivalent to the first described form.

I am aware that other modifications of specific details of construction and form, other than those already above indicated, may be made without departing from the scope of this invention as defined by the appended claims. Hence, I do not limit myself to the exact arrangements and combinations of the devices and parts as described in the foregoing specification, nor do I confine myself to the exact details of the construction of said devices and parts as illustrated in the accompanying drawings.

Having thus described my invention, I claim:—

1. A scouring device, comprising a center core comprising a readily deformable elastic body, an abrasive cover engaged upon and around said core so as to be backed thereby, said cover consisting in a metallic fabric knitted from flat ribbon-like wire to produce a multiplicity of scraping elements, and means to secure said cover relative to said core.

2. A scouring device, comprising a center core comprising a readily deformable elastic body, an abrasive cover consisting in a metallic fabric knitted from flat ribbon-like wire into tubular form and doubled on itself to provide a plurality of cover plies, said core being enclosed in said tubular cover, the open ends of said tubular cover being gathered together and closed, and means to retain said ends in such closed condition.

In testimony, that I claim the invention set forth above I have hereunto set my hand this 6th day of January, 1925.

RUSSELL B. KINGMAN.