

Feb. 8, 1949.

N. O. ELLSTRÖM

2,461,468

SCOURING PAD

Filed Dec. 26, 1945

FIG. 1.

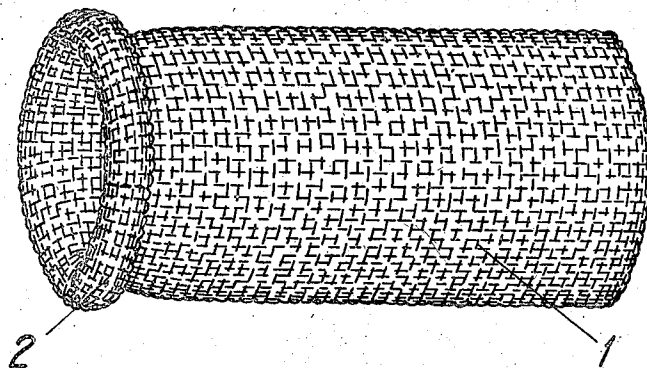


FIG. 2.

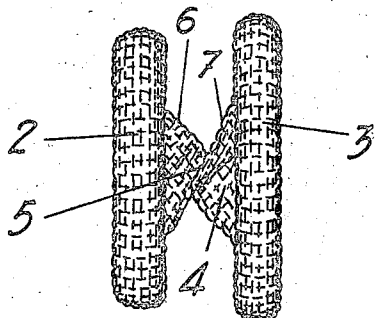


FIG. 3.

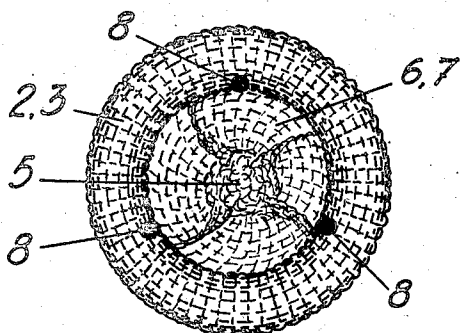
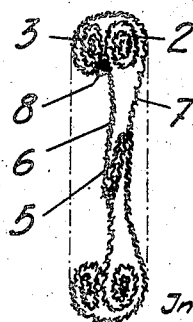


FIG. 4.



Inventor:
Nils Oskar Ellström
by W. Bayard Jones
Attorney

UNITED STATES PATENT OFFICE

2,461,468

SCOURING PAD

Nils Oskar Ellström, Aneby, Sweden, assignor, by
mesne assignments, to Getram Company, Inc.,
New York, N. Y., a corporation of New York

Application December 26, 1945, Serial No. 637,234
In Sweden January 11, 1944

1 Claim. (Cl. 15—209)

1

The present invention relates to an improvement in scouring pads which are used for scouring pots and similar kitchen utensils, and which comprise a member made of a length of tubular knitted fabric of steel wire or other metal wire.

It is an object of the present invention to obviate certain disadvantages inherent in scouring pads as heretofore used, and to provide a scouring pad which may be easily manufactured and at a small cost, and which is efficient, convenient and safe in use. Another object of the invention is to provide a scouring pad the various parts of which are retained in their desired relative positions by their own elasticity, and for the manufacture of which it shall thus be unnecessary to sew the parts of the pad together with the aid of a metal wire, thus avoiding the possibility of the user of the pad hurting his fingers on the sharp ends of such wire. A further object is to provide a scouring pad which consists essentially of an outer ring-shaped or torus-shaped member the interior of which is occupied by a comparatively thin inner member or layer of knitted fabric, whereby the scouring pad may be easily cleansed by rinsing it under a water tap after use.

The scouring pad here contemplated is of the type in which each end of the tubular fabric member is rolled back annularly upon itself toward the central portion of the said tubular member so as to form two annular rolls or bodies joined by an intermediate piece of said tubular member. The present invention is mainly characterized by said annular rolls or bodies being angularly displaced relatively to one another, and by the intermediate piece of the tubular member having a length sufficient to form, due to such angular displacement of the annular rolls or bodies, an approximately helically twisted central portion and substantially flattened web-like portions flaring from said central portion and joining it to said annular rolls or bodies, one of said annular bodies being forced over the other annular body to the opposite side thereof, whereby the web-like portion joining said first-named annular body to said central portion envelops the outer circumference of said second annular body which is thereby retained between said web-like portion and said first-named annular body.

The two annular rolls or bodies may suitably be further secured to one another by means of a number of spot welds along the inner circumference of the first-named annular body.

The invention will be more fully understood,

2

from the following description of a preferred constructional form thereof, reference being had to the accompanying drawing which illustrates various stages of the manufacture of the scouring pad. Fig. 1 shows the tubular knitted metallic fabric, one end thereof being rolled back annularly upon itself. Fig. 2 shows the two annular rolls or bodies after said bodies have been angularly displaced relatively to one another through half a revolution at least, so that the intermediate piece of tubular fabric has obtained the desired twisted or approximately helical shape. Fig. 3 shows a plan view of the scouring pad in its finished shape, and Fig. 4 shows a cross section of the finished pad.

The tubular fabric of which the scouring pad is manufactured, may be made, for instance, of a steel wire which is first rolled between a pair of rollers so that it obtains an extended cross section having sufficiently sharp edges for scouring kitchen pots and the like. Any suitable machine, such as a knitting machine, may then be used for weaving or knitting this flattened steel wire into a tubular fabric, from which pieces of a suitable length are cut off. Fig. 1 shows a length 1 of such fabric. Each end of this tubular fabric member is then rolled back annularly upon itself toward the central portion of said member, so as to produce two annular rolls or bodies 2 and 3 joined by a short intermediate piece 4 of the member. It is preferred to roll one end of the tubular fabric member 1 into a somewhat thicker roll or body 2 than the roll or body 3 formed at the other end of said member, whereby the first-named roll or body 2 will become slightly more stiff or rigid than the body 3, whereas the latter will be more elastic or resilient, for a purpose that will presently appear. When the two rolls or bodies 2 and 3 have been formed in this manner, they are turned relatively to one another around their common axis through, say, approximately half a revolution. This turning or angular displacement of the annular rolls or bodies 2 and 3 relatively to one another obviously produces a twisting of the intermediate piece 4. The length of said intermediate piece 4 is so selected that, due to the said angular displacement of the bodies 2 and 3, the said intermediate piece 4 forms an approximately helically twisted central portion 5 and substantially flattened web-like portions 6 and 7 flaring from said central portion and joining it to the said annular rolls or bodies 2 and 3, as illustrated in Fig. 2. The thinner and therefore more elastic roll or body 3 is now drawn or forced over the thicker roll

3

or body 2 to the opposite side of the latter, whereby the web-like portion 7 which joins the roll or body 3 to the central portion 5, will envelop the outer circumference of the thicker annular roll or body 2, as shown in Fig. 4, so that the said body 2 will be retained between the said web-like portion 7 and the annular body 3. In order further to secure the parts of the pad to one another, it is suitable to apply spot welds 8 at various points along the inner circumference of the annular body 3.

As will be understood from Fig. 3, the central portion of the scouring pad becomes comparatively thin, so that, while said portion forms an effective part of the scouring surface of the pad, the latter may easily be cleaned by rinsing it under a water tap. Owing to the fact that each end of the tubular fabric member is rolled back annularly upon itself, both ends of the said member will be embedded within the annular rolls or bodies 2 and 3, so that there is no danger of the user hurting his fingers on sharp wire ends at the ends of the fabric.

The constructional form above described and illustrated in the drawing is only to be regarded as an example, and it will be understood that the invention is capable of various changes and modifications within the scope of the accompanying claim.

I claim:

A scouring pad, comprising a tubular knitted metallic fabric member, each end of said tubular member being rolled back annularly upon itself toward the central portion of said member so as to form two annular rolls or bodies joined by an intermediate piece of said tubular mem-

4

ber, said annular bodies being angularly displaced relatively to one another, said intermediate piece of tubular member thereby forming an approximately helically twisted central portion and substantially flattened web-like portions flaring from said central portion and joining it to said annular bodies, one of said annular bodies being forced over the other annular body to the opposite side thereof, whereby the web-like portion joining said firstnamed annular body to said central portion envelops the outer circumference of said second annular body, said second annular body being thereby retained between said web-like portion and said firstnamed annular body, and spot welds securing said annular bodies to one another along the inner circumference of said firstnamed annular body.

NILS OSKAR ELLSTRÖM.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,498,385	Kingman	June 17, 1924
1,689,207	Kingman	Oct. 30, 1928
2,059,099	Gorman	Oct. 27, 1936
2,262,455	Goodloe	Nov. 11, 1941
2,350,357	Kelman	June 6, 1944
2,424,747	Ellis	July 29, 1947

FOREIGN PATENTS

Number	Country	Date
414,099	Germany	Aug. 22, 1924