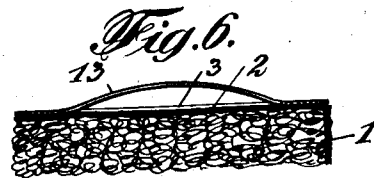
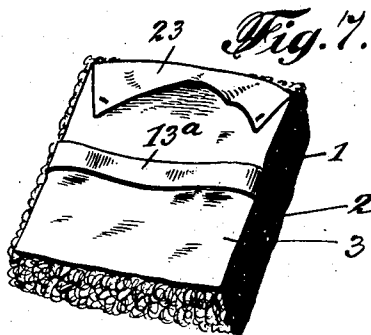
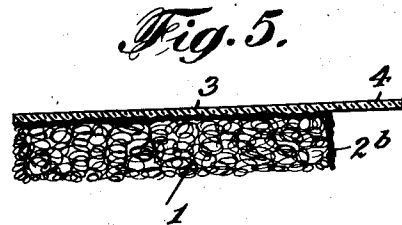
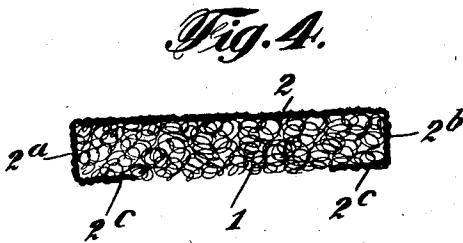
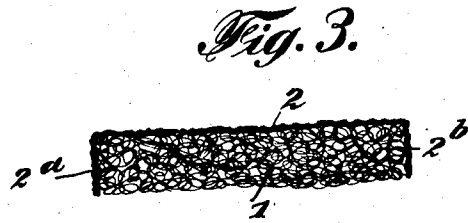
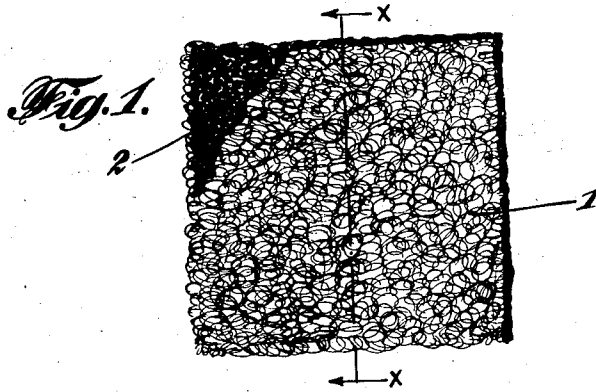


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C. FIELD
METAL WOOL ARTICLE
Filed May 27, 1924



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METAL-WOOL ARTICLE.

Application filed May 27, 1924. Serial No. 716,086.

My present invention is disclosed as applied to a steel wool pad of the kind commonly sold in the market and used for the purpose of cleaning and polishing aluminum and other metal utensils, but it is obvious that it is applicable to metal wool other than steel wool and to articles intended for other purposes than scouring aluminum.

The purpose of my invention is to improve the strength and durability of the pad, and to provide it with surfaces that will not be so likely to cut or scratch the hand of the user.

To this end I apply to the surfaces of the pad or other article, a thin coating or binder of adherent material, as, for instance, rubber or other waterproof cement. Various ways in which the invention may be employed are illustrated in the accompanying drawings, in which—

Fig. 1 is a plan view of the metal wool pad showing a part only of the surface that is covered by my protective coating, the remainder being broken away to show the ordinary matted metal wool of the pad.

Figs. 2, 3 and 4 are sections along the line X—X, showing various useful applications of my invention.

Figs. 5, 6 and 7 show various modifications of the completed pad adding to its usefulness and convenience.

In these drawings, the surfaces of the metal wool 1 may be easily and cheaply supplied with a protective coating 2, by simply pressing the surface which it is desired to protect in contact with a thin layer of ordinary rubber cement. When dry, this affords a thin and sometimes slightly matted layer of wool, the outer surfaces of which are protected by the rubber.

The thickness and depth of this skin or layer may be regulated by the depth to which the pad is wetted by the liquid cement. I find it entirely satisfactory and much less expensive to make the dipping very slight so that the covering is a mere skin, and there may be many discontinuities or perforations therein, but the cutting surfaces of the wool will be found to be matted and protected by even a very thin skin of the rubber.

In Fig. 2, the protective layer 2 is found

on the back of the pad and on one edge. In Fig. 3 there are similar coatings 2^a and 2^b on two edges of the pad.

In Fig. 4 the coating includes not only the back 2 and the edges 2^a and 2^b, but also a border portion 2^c, 2^c, exposing only a central area 1. For scouring purposes, this form affords maximum protection to the hands and the scouring operation is not interfered with since the pad is flexible and the exposed surface may be convexed to any desired extent. In course of prolonged use, practically all of the metal wool may be exuded through this surface and used up for its intended purpose.

In Fig. 5 I have shown a form which though slightly more expensive to make, has certain advantages in use. In this form the rubber cement 2 is employed as means for cementing to the back surface of the pad, a sheet 3 of rubber, fiber-board or other similar material, preferably waterproof and of substantial thickness. Preferably the backing is stiff enough to project beyond one edge of the pad as at 4, a certain distance, preferably about equal to the thickness of the thumb of the user. This edge of the pad is provided with a protective coating 2^b, such as shown in Fig. 3. This protective coating is formed on the pad to the same depth and in the same way described in connection with Figs. 1, 2 and 3. The fabric backing, which is preferably ordinary rubber cloth, such as purchased in the open market, is cemented to said preformed protective coating, preferably with the rubber coated face inward and the fabric face outward. While the other edges may be coated as in Fig. 3, or even as in Fig. 4, an advantage of the form shown in Fig. 5 is that with the thumb in the angle between 4 and 2^b and with the projecting portion 4 grasped between the thumb and the forefinger and with the other fingers or palm of the hand pressing flat upon the back of the pad a good grip for scrubbing may be had without bringing any portion of the hand of the user in contact with the bare metal wool, although the latter is fully exposed over its lower surface and about the edges, except at 2^b.

Many other variations in the distribution

of protective coatings both for scouring pads and for other metal wool articles will readily suggest themselves and will be within the spirit of my invention.

5 It will be understood also that the coating or protection on any of the surfaces may be fortified by fabric, sheet rubber or other reinforcing layer secured to the pad by the cement.

10 While rubber appears to be more suitable material for the coating, it is evident that it is possible to use other materials, such as collodion, and it is not necessary that the protective material be very flexible provided it is not brittle.

35 The waterproof backing shown in Fig. 5 may be much thinner than shown and, in practice, I have sometimes used very thin and cheap waterproof cloth.

20 Either the thinner or thicker rubberized or other waterproof material or fabric may be supplied with a loop for insertion of the hand merely by slitting an intermediate portion of the back and leaving it free of the fabric, as indicated at 13, Fig. 6.

30 A loop which is of greater width pro-

portionally to the width of the pad may be had by cementing in a separate loop like 13^a, Fig. 7, and this may be supplemented by having a pocket 23 for the ends of the fingers 30 which may be formed by turning back a flap of the fabric and securing it at the side, as indicated at 23, Fig. 7. The fabric may be secured by sewing instead of cement.

Other variations and combinations of the 35 above ideas will readily suggest themselves.

I claim:

1. A steel wool article for manual use, comprising a steel wool pad having one face, the edges of the surface engaged by the hand, 40 and the edge portions of the working surface, coated with a thin skin of flexible rubber.

2. A steel wool article for manual use, comprising a steel wool pad having one face coated with a thin skin of flexible rubber, one 45 edge of said pad being coated with a thin skin of flexible rubber to protect the operator's hand.

Signed at New York city in the county of New York and State of New York, this 50 26th day of May, A. D. 1924.

CROSBY FIELD.