June 10, 1924. 1,497,114

J. J. MORIARTY ET AL

METAL WOOL UTENSIL

Filed Sept. 14, 1922

Fig. 1.

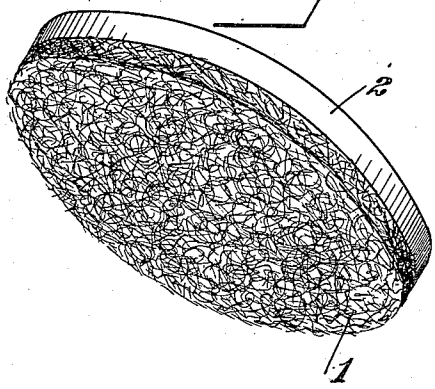


Fig. 2.

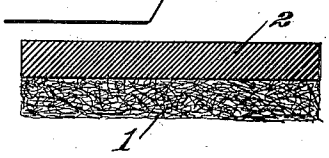


Fig. 3.

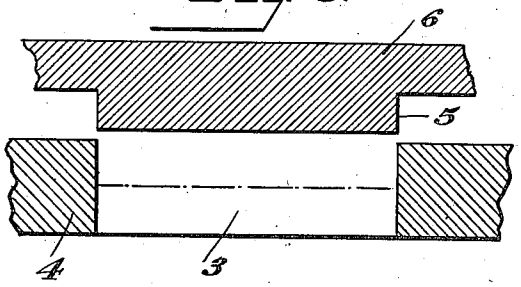
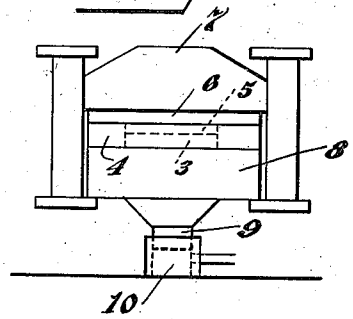


Fig. 4.



John J. Moriarty Inventor
and Alan W. Mintz

By Haley & Bowman
Attorneys

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UNITED STATES PATENT OFFICE.

JOHN J. MORIARTY AND ALAN W. WENTZ, OF SPRINGFIELD, OHIO.

METAL-WOOL UTENSIL.

Application filed September 14, 1922. Serial No. 588,232.

To all whom it may concern:

Be it known that we, JOHN J. MORIARTY, a subject of the King of Great Britain, and ALAN W. WENTZ, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Metal-Wool Utensils, of which the following is a specification.

This invention relates to utensils for scouring and the method of making same, and especially relates to utensils of this character in which metal wool is employed as the scouring agent.

The object of the invention is to provide a simple and effective holder or back for the metal wool of a character which will have sufficient rigidity to maintain the utensil in substantially original shape and which will provide a convenient means for grasping the utensil without the necessity of bringing the hand of the user in direct contact with the metal wool.

A further object of the invention is to provide a binder for the metal wool of a character which will retain the wool in compressed state during use.

In the accompanying drawings:

Fig. 1 is a perspective view of a utensil embodying the improvements.

Fig. 2 is a sectional view of the same.

Fig. 3 is a section of a portion of the dies employed in the manufacture of the utensil.

Fig. 4 is a side view of the press which receives the dies with the dies shown in position therein.

For the scouring agent of our improved utensil we preferably employ metal wool mixed with an adhesive material, as indicated at 1, the metal wool being preferably commercial steel wool and the adhesive material rubber cement or other suitable rubber compound. For the back or holder we preferably employ a rubber compound 2. The rubber compound which forms the back in a plastic state together with the wool are placed in layers of suitable thickness in the opening 3 of the female member 4 of a die and compressed by the projection 5 of the male die member 6. The die members are equipped with a plurality of apertures and projections so that a plurality of utensils may be made at a single operation of the press which is shown in Fig. 4, the die members being placed between the stationary head 7 and the movable platen 8, which platen is connected with the piston 9 of a cylinder 10, the piston being operated by hydraulic power, compressed air or other suitable means. The head and platen are of a hollow character to receive steam for vulcanizing the product in the dies.

In compressing the mass a certain proportion of the rubber compound will permeate the steel wool mass so as to act as an adhesive element, and the mass of wool is also preferably first dipped in rubber cement or other soft plastic rubber compound. After compression the articles are vulcanized in a suitable vulcanizer and as a result a back for the wool is secured with sufficient rigidity to hold the mass of metal wool in its original shape after vulcanization for scouring purposes, the wool itself being held in a compact mass by the adhesive mingled therewith. The back also furnishes the means whereby the utensil may be grasped by the user.

Having thus described our invention, we claim:

In a utensil of the character described, a mass of metal wool, an adhesive element of rubber compound intermingled with said wool, a back for said mass of wool and adhesive element formed of rubber compound, said back, wool and adhesive element being held in a compact mass by vulcanization.

In testimony whereof, we have hereunto set our hands this 13th day of September, 1922.

JOHN J. MORIARTY.
ALAN W. WENTZ.