March 23, 1948. A. A. DE SEMPLE 2,438,152

STEEL WOOL HOLDER

Filed July 9, 1946

Fig 1

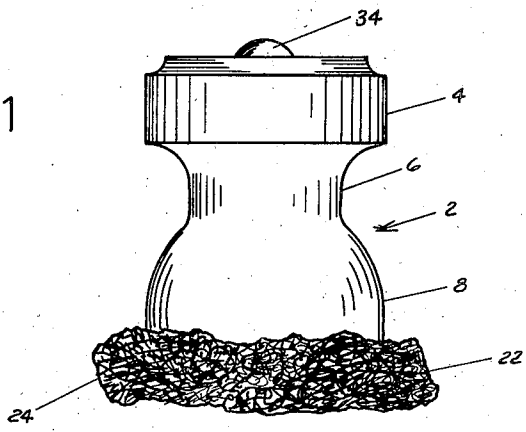



Fig 2

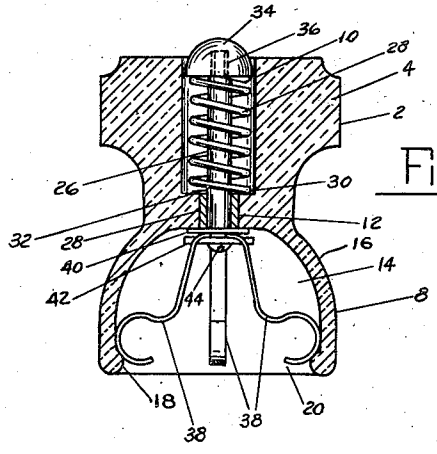
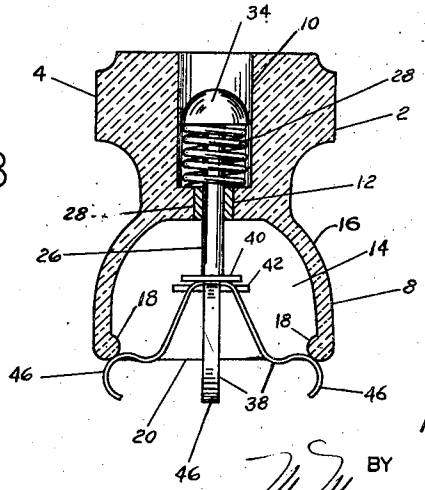



Fig 3

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2,438,152

## STEEL WOOL HOLDER

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1 Claim. (Cl. 15—209)

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This invention relates to holders for steel wool and the like.

An object of the invention is to provide a device comprising a body portion adapted for being grasped by the hand, and having means for securing thereto a quantity of steel wool or the like for use as a cleaning agent.

Another object of the invention is to provide a steel wool holder having a recess formed therein for the reception of part of a tuft of steel wool or the like with the rest of the tuft protruding out of the recess for use in cleaning, said holder having releasable means for securely holding said steel wool in said recess.

A further object of the invention is to provide a device which may be conveniently held in the hand and having means for securely holding a quantity of steel wool therein with part of the wool protruding for use in cleaning, said holding means being conveniently releasable without the need for use of more than the one hand.

Another object of the invention is to provide a steel wool holder which is simple in design, inexpensive to manufacture, and effective in operation.

Other objects and advantages of the invention will become apparent from the following description of a preferred embodiment thereof as illustrated in the accompanying drawing, and in which—

Figure 1 is an elevational view of the improved steel wool holder, showing the wool in position,

Figure 2 is a sectional elevation of the holder shown in Figure 1, with the wool gripping device in wool holding position, and

Figure 3 is a sectional elevation similar to Figure 2 except that the wool gripping device is shown in depressed or wool releasing position.

In the use of steel wool for such chores as cleaning aluminum pots and pans, it is commonly found that a tuft or pad of steel wool when held in the hand and thus used, leaves fine steel wool splinters which work themselves into the skin of the hands and fingers with resultant discomfort and possible infection. The present invention discloses a device which may be held in the hands and has provision for securing thereto a tuft of steel wool out of contact with the hands for use in cleaning, and also has means for gripping and releasing the steel wool which are operable without contact of the hands with the steel wool.

As illustrated in the drawing, there is a main body portion 2 having its upper end portion 4 substantially cylindrical in contour, the body portion being reduced at its intermediate portion 6

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and again enlarged at its lower portion 8. The main body portion 2 may be formed of wood, metal or plastic, and is shaped for being conveniently and effectively grasped by the hand.

The body portion 2 has an axial bore 10 which is reduced at 12 where it then opens out into a shell-like recess 14, the rim 16 of which is rounded inwardly as shown to slightly constrict the lips 18 of the open mouth 20 of the recess 14. The interior walls of the recess 14, are smooth as illustrated, and form a downwardly open chamber for the reception of an upper portion of a wad or ball 22 of steel wool or the like, the lower portion 24 of which protrudes downward out of the chamber 14 for use as a cleaning agent.

A push rod 26 is slidable vertically in bushing 28 disposed in bore 12 and extends upwardly through bore 12 as shown in Figure 2. A coil spring 28 encircles the push rod 26, having its lower end 30 bearing against the shoulder 32 at the bottom of bore 10 and being retained in the bore 10 by means of a cap or push button 34 secured to the upper end 36 of the push rod 26 and having an outside diameter smaller than the inside diameter of the bore 10.

The spring fingers 38 have their upper ends secured between apertured lock nut 40 and washer 42 through which extend a screw 44 threaded into the lower end of the shaft rod 26.

As shown there are four spring fingers 38 spaced 90 degrees apart and they have their lower ends formed into inturned gripping claws or hooks 46. As shown in Figure 2, the push rod is in its uppermost position as biased by spring 28, the upward movement of the rod 26 being limited by the lock nut 40. The spring fingers are shown disposed within the chamber 14, their hooked ends or claws 46 having been cammed inward by the inturned lips 18 and thus engaged in this position.

When the user desires to insert some steel wool into the device, he has only to depress the push button with his finger to the position shown in Figure 3, whereupon the spring fingers are disengaged and spread out as their hooks 46 are depressed below the mouth of the chamber 14. Then the device is pressed down on top of a tuft of steel wool and the push button 34 released, thus allowing it to spring upwards to the position of Figure 2, and the spring finger hooks 46 are cammed inward by the lips 18, drawing the upper portion of the tuft of steel into the chamber 14 and holding it securely therein, being engaged in this position. To disengage the tuft of steel wool from the device, it is only nec-

essary to depress the plunger button 34 as shown in Figure 3, whereupon the spring gripping fingers spring further apart to the positions shown in the view, and their hooks 46 no longer grip the steel wool, allowing it to fall away from the device.

Although I have described a preferred embodiment of my invention in specific terms, it is to be understood that various changes may be made in size, shape, materials and arrangement without departing from the spirit and scope of the invention as claimed.

I claim:

A device for holding steel wool or the like, comprising a main body portion having a central bore enlarged at its upper end to form a shoulder and opening out at its lower end to form a downwardly open recess for the reception of a portion of a wad of steel wool, the rim of said recess being inwardly extended to form an annular lip, an operating rod vertically reciprocable in said bore with its lower end extending into said recess, stop means carried by said lower end of the rod for preventing said end from moving upwards out of the recess, a push button fastened on the upper end of said rod, a spring disposed in said upper enlarged bore coaxial with said rod and acting resiliently between the shoulder of said enlarged bore and said push button for biasing said rod upwards, and a plurality of spring fingers in said recess



and secured at their upper ends to said lower end of the rod and having their lower ends biased radially outwardly against the annular lip of said recess, said lower ends of the spring fingers being formed in the shape of inturned claws for engaging a portion of a wad of steel wool whereby, upon depression of said push button said spring fingers are moved downwardly so that their lower hooked ends expand upon leaving said recess, and upon upward motion of said push button said lower claw ends of the spring fingers grasp a portion of a wad of steel wool to draw it upwards into said recess and engage said annular lip.

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## REFERENCES CITED

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

UNITED STATES PATENTS

| Number | Name | Date |
|---|---|---|
| 1,438,794 | Tudor | Dec. 12, 1922 |
| 1,686,526 | Lacy | Oct. 9, 1928 |
| 2,296,133 | Wolfe | Sept. 15, 1942 |
| 2,364,319 | Schimel | Dec. 5, 1944 |

FOREIGN PATENTS

| Number | Country | Date |
|---|---|---|
| 777,963 | France | Dec. 15, 1934 |
| 35,120 | France | June 18, 1929 |

(Addition to No. 616,451)