June 4, 1940. A. M. ANDERSON 2,203,451

MOP

Filed July 27, 1937

Fig. 1.

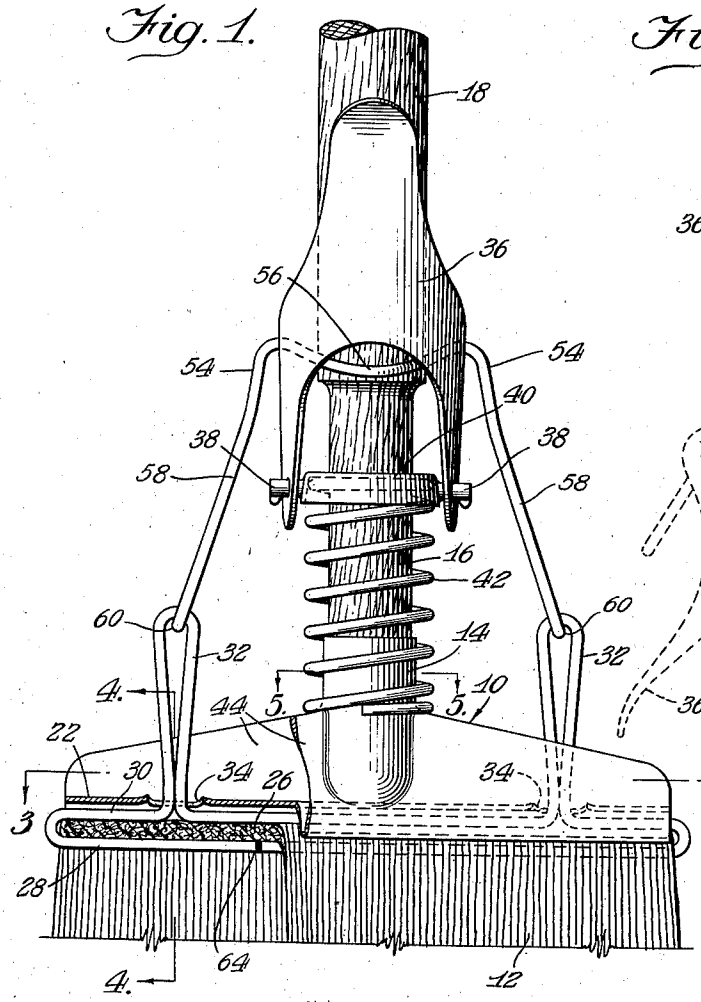


Fig. 2.

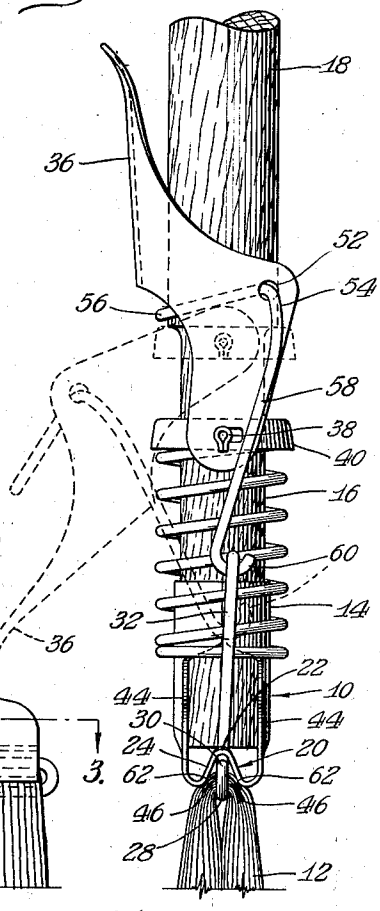


Fig. 3.

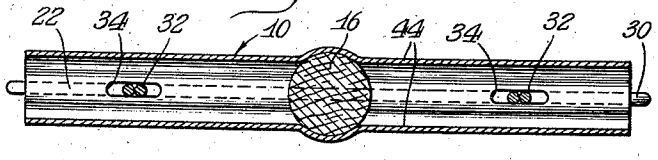


Fig. 4.

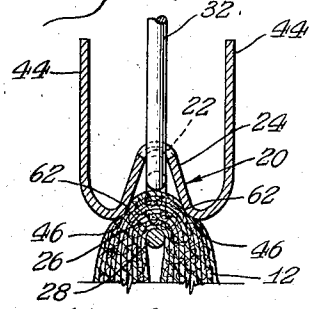
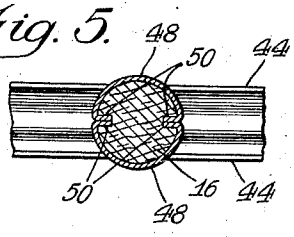


Fig. 5.



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HIS ATTORNEYS

Patented June 4, 1940

2,203,451

UNITED STATES PATENT OFFICE

2,203,451

MOP

Arthur M. Anderson, Chicago, Ill.

Application July 27, 1937, Serial No. 156,007

1 Claim. (Cl. 15—152)

My invention relates to mops and has among its objects and advantages the provision of improved means for detachably connecting a swab with the handle.

In the accompanying drawing:

Fig. 1 is an elevational view partly in section of a mop according to the invention;

Fig. 2 is a side elevation;

Fig. 3 is a sectional view along the line 3—3 of Fig. 1;

Fig. 4 is a sectional view along the line 4—4 of Fig. 1; and

Fig. 5 is a sectional view along the line 5—5 of Fig. 1;

In the embodiment selected to illustrate my invention I make use of a head 10 which supports a swab 12 and is provided with a socket 14 within which the reduced reach 16 of the handle 18 is anchored. The head 10 is shaped from a single piece of sheet metal and includes a trough 20 terminating in a bight 22.

The trough includes converging walls 24 between which the folded part 26 of the swab 12 is positioned. In Fig. 1, I illustrate the fold 26 of the swab as being pinched between parallel wire reaches 28 and 30. The reach 30 is bent to provide loops 32 which project through openings 24 in the bight 22.

Upon the handle 18 I mount a lever 36 which has one end pivotally mounted upon shafts 38 carried by a ring 40 loosely mounted on the reach 16. One end of a compression spring 42 abuts the ring 40, while the opposite end embraces the socket 14 and is arranged in abutting relation with the flanges 44 comprising extensions of the trough 20. In shaping the flanges 44 I bend the sheet material back upon itself at 46 to position the flanges 44 in parallel and spaced relation. Each flange includes an extension 48 which is curved to embrace the reduced reach 16. The edges of the extensions 48 are bent to provide anchoring elements 50 which are pressed into the material of the handle for firmly connecting the head therewith.

The lever 36 is provided with openings 52 for the reception of a stiff wire 54 which is bowed at 56 to accommodate the handle 18. The wire is bent to provide depending reaches 58 terminating in hooks 60 which are hooked through the loops 32. With the lever 36 positioned as illustrated by full lines in Fig. 2, the reaches 28 and 30 which constitute the swab holder are urged inwardly of the trough because of the compression of the spring 42.

When the lever is moved to the dotted line position, the tension of the spring 42 is released to such a degree that the loops 32 may be disconnected from the hooks 60 and the swab and its holder removed from the trough. In Fig. 4, the swab 12 is pinched between the walls 24, as indicated at 62. The relation between the converging walls 24, and the fold 26 of the swab is such as to hold the reach 30 in spaced relation with the bight. 22. Thus, the fold of the swab is effectively pinched between the converging walls 24. The converging walls press the fold 26 firmly about the reach 28, and the pressure relation between the fold and the walls 24 will remain throughout the life of the swab 12. Because of the pressure relation between the swab and the walls, a firm connection is maintained between the swab and the head 10 at all times.

To substitute a new swab for the original, adjustment of the lever 36 downwardly about its pivots 38 loosens the hooks 60 with respect to the loops 32. After disconnection of the hooks, the loops may be pulled downwardly through the openings 34 with the swab 12. A swab holder may be easily shaped from a single piece of wire so that the holder may be thrown away with the worn swab 12. In Fig. 1, I illustrate the ends of the wire from which the swab holder is shaped as being welded together at 64.

Without further elaboration, the foregoing will so fully explain my invention that others may, by applying current knowledge, readily adapt the same for use under various conditions of service.

I claim:

A mop comprising a handle having a head provided with a trough, said trough comprising spaced side walls interconnected by a bight having openings, said side walls converging in the direction of said bight, a swab folded to provide a bight, a holder for the swab, said holder comprising a wire bent to provide two parallel reaches, the bight of the swab being pinched between said parallel reaches, one of said parallel reaches being bent to provide a pair of loops extending through said openings, and tensioning means connected with said loops and co-operable on the handle and said head for drawing the bight of the swab into pressure relation with said side walls with said spaced parallel reaches spaced from the walls.

ARTHUR M. ANDERSON.