April 10, 1951 K. YAMASHIRO 2,548,331

WASHING APPARATUS FOR AUTOMOBILES AND THE LIKE

Filed April 9, 1948

Fig. 1

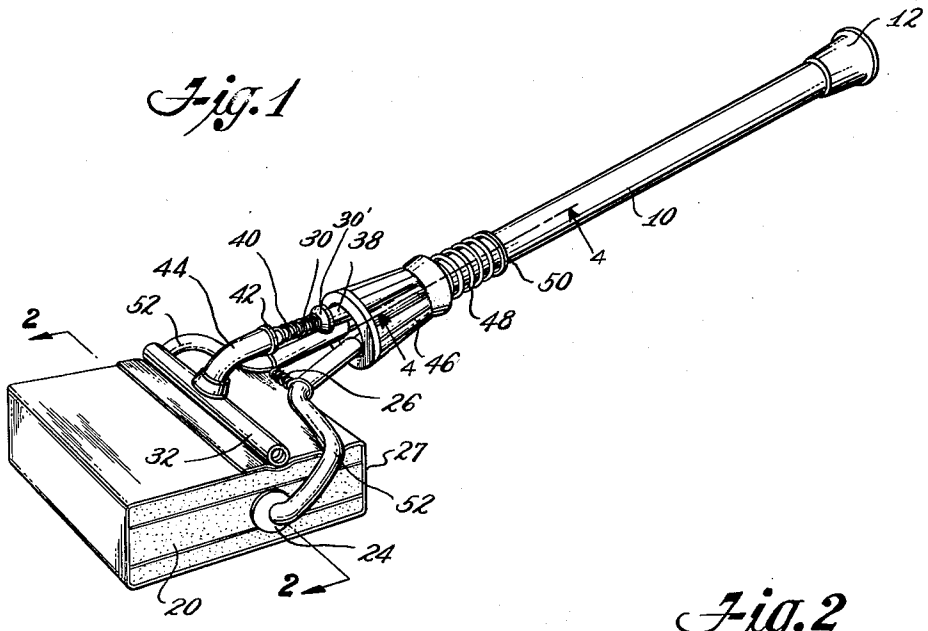


Fig. 2

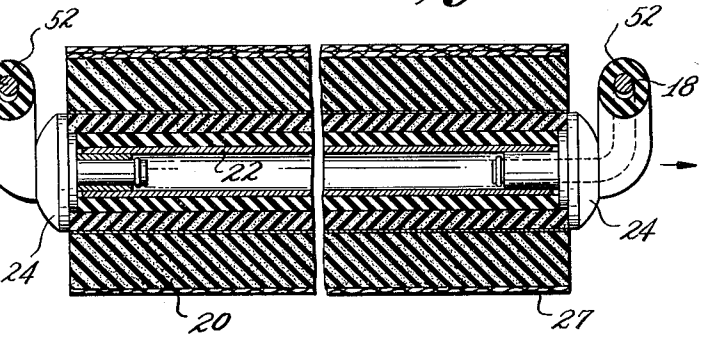


Fig. 3

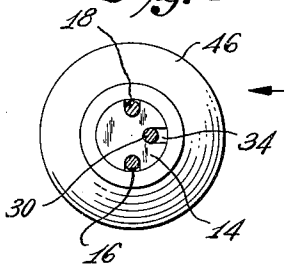
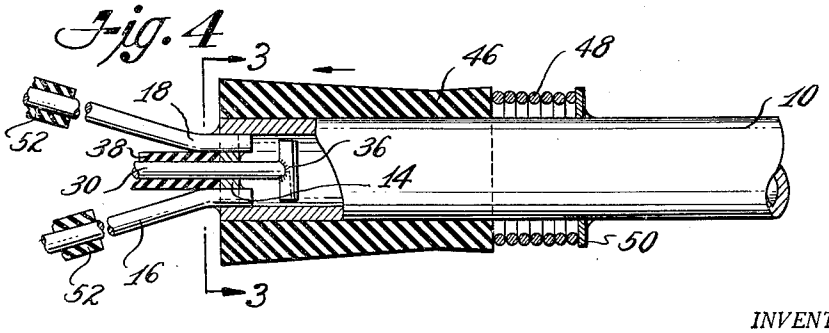


Fig. 4



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Patented Apr. 10, 1951 2,548,331

UNITED STATES PATENT OFFICE

2,548,331

WASHING APPARATUS FOR AUTOMOBILES AND THE LIKE

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Application April 9, 1948, Serial No. 19,950

3 Claims. (Cl. 15—231)

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My invention relates to a device designed particularly for washing automobiles although not limited to such use.

In washing automobiles care has to be used to avoid marring the fine finish of the enamel by scratches and it is general practice to first wash off surface dust with a stream of clean water and thereafter wash the enamel with soap and water using soft sponges or cloths and to finally polish the car finish with appropriate preparations applied with a dry cloth.

While sponges and cloths produce good results in the hands of a mechanic dressed in work clothes, the majority of cars are washed by their owners and the use of a sponge or bunched up cloth held in the hand usually involves damage to clothing from dirty water.

It is an object of my invention to provide a device upon which a cloth may be readily mounted and held at a distance while in use thus avoiding the drawback of water trickling or being thrown onto the user's clothes.

It is a further object of my invention to provide a pad which will hold water and around which a cloth may be easily secured so that the cloth is kept wet for extended periods thus reducing the work of keeping it wet by dipping it in a basin or pail.

A still further object of my invention is to provide a device for washing automobiles and the like provided with a support on which a washing cloth may be mounted in a readily removable manner, the washing material being held to present a definite shape remaining unchanged during operation.

Yet another object of the invention is to provide a device for the purpose specified provided with a resilient pad around which a washing cloth may be wound and retained in position by readily releasable means.

Another object of the invention is to provide a device for washing automobiles and other surfaces which is arranged to secure various advantages over any devices for similar purposes at present known to me but is of simple and rugged construction.

Still further objects and features of the invention will appear from the following description taken in conjunction with the accompanying drawings which illustrate a preferred form of my invention but it is to be understood that various changes and modifications may be made by those skilled in the art without departing from the scope of the invention as intended to be defined by the appended claims.

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In the drawings:

Fig. 1 is a perspective view of the device of my invention showing a washing cloth mounted thereon;

Fig. 2 is a cross section on the line 2—2 of Fig. 1 drawn to a larger scale;

Fig. 3 is a cross section taken on line 3—3 of Fig. 4; and

Fig. 4 is a fragmentary section longitudinally of the handle taken on the line 4—4 of Fig. 1 showing the structure and mounting of the tensioning member.

In the drawings the numeral 10 indicates the handle of the device which may be formed from a length of tube having one end closed, for instance, by a rubber ferrule 12 such as is used on the ends of walking canes or crutches.

The opposite end of the tubular shaft is closed by a plate 14 brazed or otherwise secured to the end of the tube, and two outwardly projecting rods 16 and 18 are secured in the plate 14 at one end. The rods are bent away from one another as clearly shown in Fig. 1, to receive a block or pad 20 of resilient and water-holding material, such as sponge rubber, more fully described hereinafter, and the free ends of rods 16, 18 are inwardly bent at a sharp angle to engage in the edges of block 20.

Preferably a transversely arranged length of tube 22 is arranged to extend through the thickness of block 20, the ends of rods 16 and 18 engaging in the ends of the tube. Stops or buttons 24 may be secured on the inwardly turned ends of the rods to limit the extent of penetration thereof into the tube 22. The construction described ensures that the block or pad 20 is not deformed by the inward pressure of rods 16, 18, but is nevertheless securely held thereby, and in addition the pad may readily follow the contour of a curved surface by tilting on the rod ends. While the rods may be sufficiently resilient to maintain secure engagement with the pad a tension spring 26 is preferably fitted to aid in keeping the rods in engagement with the pad.

The device is intended to be used with pieces of washing cloth or chamois leather 27 wrapped around it, although of course, it may be used to advantage without the cloth.

In order to provide a readily releasable holding means for a cloth 27 wrapped around the pad I arrange a third rod 30 extending from the end of the tubular handle and fitted at its free end with a cross bar 32 arranged to press the overlapped ends of the cloth against the back of the pad along a line parallel to the tube 22, thus not

only having a more effective gripping action on the cloth because of the lessened resiliency of the pad along this line, but also enabling the clamping action to be maintained notwithstanding a tilting movement of the pad. While various ways of ensuring adequate pressure of the cross bar **32** against the pad and of mounting the rod **30** on the tubular handle may be availed of, I have found the illustrated construction simple and effective. As shown, the rod **30** is passed through a hole **34** elongated in a radial direction in plate **14** and is provided with a head **36** adjacent the lower face of the plate and ends of rods **16** and **18**. In order to keep the head **36** in such position while leaving the lower portion of rod **30** smooth, a length of tube **38** is arranged around the lower end of rod **30** and has an abutment **30'** for a compression spring **40** which bears against an opposite abutment **42** which may be mounted in any suitable way on the rod **30**. As shown in the drawings the abutment **42** is spaced from cross bar **32** by a second length **44** of tube.

In order to press the cross bar **32** against the pad, the rod **30** is bent from the axis of handle **10** as shown in Fig. 1, and a sleeve **46** of resilient material is forced against the bent portion of rod **30** by a spring **48** placed under compression between the end of sleeve **46** and an abutment **50** mounted on the tubular handle. By simply slipping sleeve **46** longitudinally against the resistance of spring **48**, cross bar **32** may be freely moved away from the back of the pad and the cloth removed for washing. Thereafter the cloth may again be positioned by wrapping it around the pad with the overlap located so as to be engaged firmly by the cross bar **32** when the sleeve **46** is moved outwardly. It will be noted that in the described construction the resiliency of the sleeve **46** is relied on to exert pressure on the rod **30** acting to urge it toward the plane of rods **16** and **18**, spring **48** serving to prevent the sleeve from slacking back.

It will be noted that the inner head **36** of the rod **30** is formed as a bar and is effective in tending to keep the rod **30** perpendicular to plate **14**.

Since the device is intended primarily for washing automobiles the metal rods are covered by lengths of rubber tubing **52** which loosely fit on the rods to provide a cushioning effect and ensure the surface finish of the automobile against being scratched.

I claim:

1. A device for washing automobile and other surfaces, including: a handle; arms secured to one end of said handle; a resilient pad; a rigid member incorporated in said pad and extending transversely thereof and engaged with the ends of said arms; a cloth holding means secured to the handle and arranged to bear against the back of the pad in line with the rigid member; and a displaceable sleeve surrounding a portion of said arms and of said cloth holding means, the positioning of said sleeve toward the pad holding end of the arms being effective to press the cloth holding means against the pad while positioning of the displaceable sleeve in the opposite direction leaves the cloth holding means free to be released from contact with the back of said pad.

2. A device for washing automobile and other surfaces, including: a handle; arms secured to one end of said handle; a resilient pad; a rigid member incorporated in said pad and extending transversely thereof and engaged with the ends of said arms; a cloth holding means secured to the handle and arranged to bear against the back of the pad in line with the rigid member; a displaceable sleeve surrounding a portion of said arms and of said cloth holding means, the positioning of said sleeve toward the pad holding end of the arms being effective to press the cloth holding means against the pad while positioning of the displaceable sleeve in the opposite direction leaves the cloth holding means free to be released from contact with the back of said pad; and a spring mounted on the handle and bearing against said displaceable sleeve to resiliently urge the latter toward the pressing position.

3. A device for washing automobile and other surfaces, including: a handle; a pair of arms secured to one end of said handle and resiliently urged toward one another; a resilient pad; a rigid member incorporated in said pad and engaged by said arms; and means carried by said handle for detachably securing a length of washing material around said resilient pad, the rigid member incorporated in said pad being formed with open ends and the ends of said arms being inturned to engage in said open ends; and a spring connected between said arms to detachably retain the ends of the arms in engagement with the open ends of the rigid member.

KAMEO YAMASHIRO.

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