Aug. 8, 1950 C. L. SETTERGREN 2,518,384

HOLDER FOR PLASTIC SHEET USED FOR CLEANING OR POLISHING HARD SURFACES

Filed Dec. 27, 1946

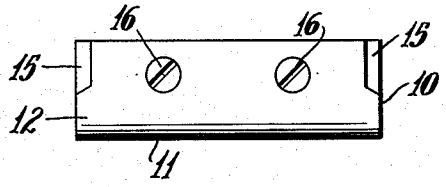


Fig. 2

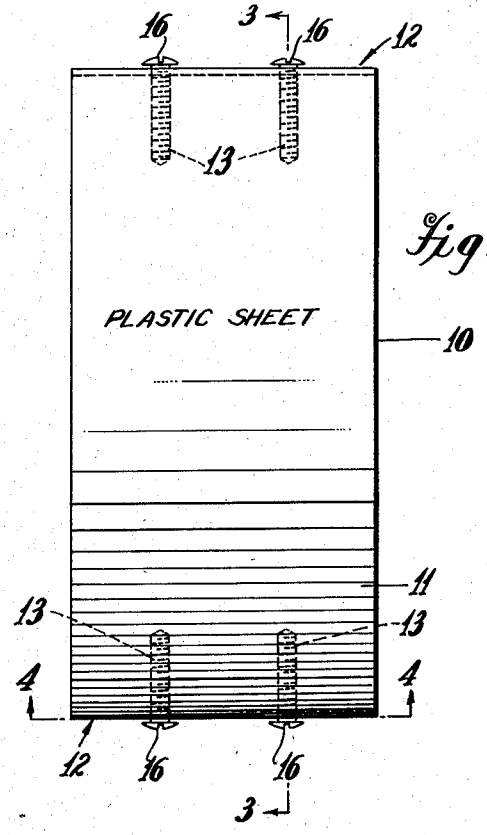


Fig 1

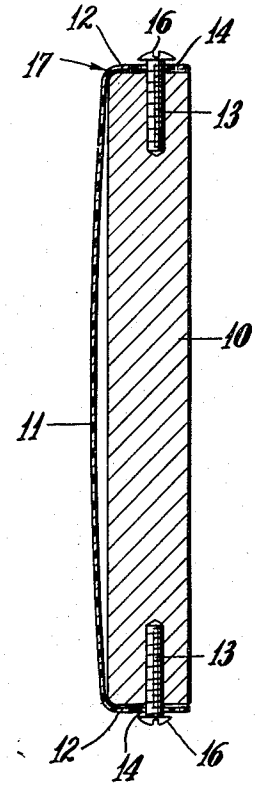


Fig 3

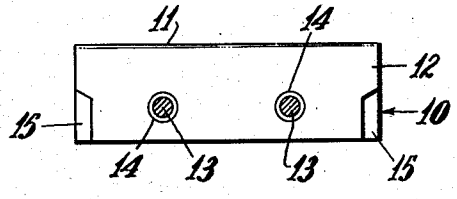


Fig. 4

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HOLDER FOR PLASTIC SHEET USED FOR CLEANING OR POLISHING HARD SURFACES

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1 Claim. (Cl. 15—104)

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This invention relates to surface cleaning implements, and aims to provide a novel and useful device for cleaning or polishing windows while dry, thus eliminating the necessity of washing windows, with the attendant discomfort to the hands, especially in cold weather, and the need to carry a pail of water.

Another object of the invention is the provision of a surface cleaning implement which is simple in construction and operation and at the same time inexpensive in cost of manufacture, and which is useful as a window cleaner and polisher, as well as to clean or polish marble or slate and for sharpening razors.

In the usual manner of cleaning windows water or some other liquid is employed, which must be spread on the window by means of a cloth or sponge saturated with the liquid and the glass must be rinsed off with another cloth or sponge saturated with clean water. Finally, the window is dried with another cloth or a squeegee to remove the water from the surface of the glass. The above process is laborious and time consuming and in cool or cold weather is very uncomfortable for the hands of the window washer. The device of this invention removes dirt, dust, and grime from window panes without the use of water or other liquids, and hence provides a quicker, easier and more comfortable window cleaning means than the washing of the windows.

The above as well as additional and more detailed objects will become apparent in the following description, wherein reference numerals refer to like-numbered parts in the accompanying drawing. It is to be noted that the drawing is intended for the purpose of illustration only and that it is neither desired nor intended to limit the invention to any or all of the specific details of construction shown, excepting insofar as they may be deemed essential to the invention.

Referring briefly to the drawing, Fig. 1 is a bottom plan view of the window cleaner.

Fig. 2 is an end elevational view of the same.

Fig. 3 is a longitudinal sectional view taken on the line 3—3 of Fig. 1.

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 1.

Referring in detail to the drawing, the numeral 10 indicates a substantially rectangular block of suitable material, such as, for example, wood or plastic, which serves as the body of the implement. A rectangular sheet of a plastic material 11, such as, for example, polystyrene, of a width substantially equal to the width of the block 10 and of a length substantially equal to the

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sum of the length of the block 10 plus twice the thickness of the block, has its extremities bent substantially at right angles for a distance approximately equal to the thickness of the block 10 to provide ears 12. Any suitable plastic material may be used and if the material although possessing a degree of flexibility is difficult to bend as shown without breaking, then the sheet may be heated to about 280 degrees F. and bent on a mold. The sheet thus treated maintains its shape.

The plastic sheet 11 is positioned over the block 10 with the intermediate portion between the ears 12 bellied outward, substantially as shown (Fig. 1), with the ears 12 aligned with the ends of the block 10. The plastic sheet 11 is secured to the block 10 by screws 13 which pass through holes 14 in the ears 12 and screw into the block 10. It is to be noted that the holes 14 are somewhat larger than the shafts of the screws 13 but smaller than the heads 16 of the screws, and that the screws are not tightened down against the plastic sheet 11 but allow slight clearance between the heads 16 and the block 10, thereby allowing the ears 12 of the sheet 11 to slide on the screws 13 between the heads 16 of the screws and the block 10, in response to any outward urging, as by flattening of the arched sheet 11.

Cut-outs 15 are provided at the corners of the ears 12 to permit freer flexing of the arched portion of the sheet 11. They also prevent the edges from catching on the clothing of the user or on other objects while the implement is in use.

To clean or polish a window or other hard-surfaced material such as marble, the user grasps the body 10, with the plastic sheet facing away from the hand. The implement is then placed against the surface to be cleaned and moved over the surface with a wiping motion, slight pressure being maintained the while to flatten the arch and thereby bring the entire area of the plastic sheet against the surface. The plastic material, being softer than glass or marble, does not scratch the surface, but picks up any dust and grit which may be on the glass, thus cleaning it without the use of water or other liquid. In polishing the flutes of marble columns, the rounded edges 17 are worked along the concave surfaces of the flutes. The resiliency of the arched plastic sheet causes the greater part of the exposed surface of the sheet to be in contact with the surface being cleaned as the pressure on the block normally varies while the block is moved to and fro. This resiliency plus the relative softness of the sheet permits the latter

to wipe dust etc. from the surface being cleaned without scratching or marring the latter.

Obviously, modifications may be made in form and structure without departing from the spirit and scope of the invention.

I claim:

An article of the class described comprising a substantially parallel pipedal block having opposed faces at least one of which is flat and having opposed substantially flat end walls, a sheet of plastic material possessing a degree of resiliency and having its extremities bent substantially at right angles to form ears, said sheet being mounted in outwardly arched condition on said flat face of said block with said ears positioned adjacent the end walls of the block, screws anchored in said end walls and having heads thereon spaced from said end walls, said ears having holes therethrough of greater diameter than said screws and of smaller diameter than the said heads, said screws passing through said holes, said ears being thereby slidably mounted on said screws, said ears being normally urged toward each other and against said end walls by the resiliency of said plastic sheet, said ears being urged outward against said screw heads by flattening of the said arched sheet upon application thereof to a hard surface.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
144,764	Holly	Nov. 18, 1873
577,005	Brougher	Feb. 16, 1897
944,262	Friedrick	Dec. 28, 1909
1,081,053	Marui	Dec. 9, 1913
1,934,139	Pavitt	Nov. 7, 1933
2,331,412	Miller	Oct. 12, 1943

FOREIGN PATENTS

Number	Country	Date
9,052	Great Britain	Sept. 5, 1932
406,800	Great Britain	Mar. 8, 1934