

April 11, 1939.

R. BULLEIGH
WINDSHIELD CLEANER
Filed Oct. 9, 1937

2,154,373

Fig. 1.

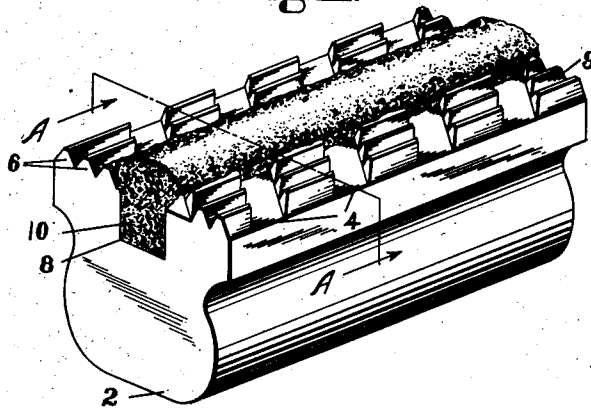
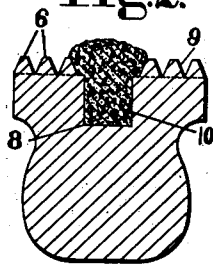


Fig. 2.



INVENTOR
Robert Bulleigh
By his attorney
Arthur L. Russell

UNITED STATES PATENT OFFICE

2,154,373

WINDSHIELD CLEANER

Robert Bulleigh, Greeley, Colo., assignor of one-third to H. E. Watson, Denver, Colo.

Application October 9, 1937, Serial No. 168,247

3 Claims. (Cl. 15-118)

This invention has for its object to provide an inexpensive piece of efficient equipment well adapted for most convenient use by such workers as oil station attendants, in quickly preparing glass windshields, etc., for final drying and polishing for waiting customers who have usually made their purchases and are eager to be on their way.

One of the conditions frequently encountered by such workers is the presence of strongly adhering foreign matter on the windshield, including not only grimy dust particles and insect stains, but also particles of tarry sand and gravel which it has been necessary to scrape off with a pocket knife, for example.

With these conditions in mind, I have provided a short hand tool comprising a grip portion, an opposed operating portion formed to carry a removable strip of sponge and, formed on said operating portion and closely adjacent to the sponge strip, with a diagonal corrugated surface of substantial width relative to the sponge strip.

This hand tool may be economically made from a strip or rail of wood of indefinite length, which rail is first contoured to provide the hand grip on one face, then is longitudinally grooved along its opposite face to provide one deep groove for the sponge strip and a plurality of shallow grooves. The next operation is to cut, with a wide-toothed saw, diagonal cross-grooves to about the depth of the shallow longitudinal grooves, thus producing a diagonal corrugated or ribbed surface. After this the walls of the deep groove are cement-coated and the sponge strip compressed and inserted. As soon as the cement has set, the rail may be cut transversely into individual tool lengths.

Fig. 1 of the drawing is a perspective view; and Fig. 2 is a transverse section.

The hand-grip portion of the cleaner is indicated at 2. The opposite face has wide diagonal grooves 4 presenting vertical side-walls of projections 6. The deep longitudinal groove 8 receives the sponge strip 10 which is held securely by cement. Shallow grooves 9 interrupt or divide the surface of the projections 6, leaving the top surfaces narrow. The side walls of the projections 6 do most of the work of dislodging firmly adhering particles, foreign matter, and grit. The sponge strip projects above the scraping projections 6 sufficiently to enable the sponge strip to be used for washing the windshield, but not too much to permit the sponge strip to be compressed until the scraping projections can be brought to bear firmly on the windshield to dislodge tena-

ciously adhering foreign matter by the rubbing action of the vertical sides of the said projections. Loosened sand or gravel escapes through the grooves 4.

As shown, the sponge strip is located near the longitudinal center of the cleaner so that it can be used for washing the windshield without necessarily contacting the projections 6 therewith, or, by tipping the cleaner with his hands, the worker may use the projections alone for dislodging firmly adhering foreign matter; or both the sponge and the projections 6 may be caused to contact successive portions of the surface being cleaned as the tool is rubbed over the surface.

Wood or other non-metallic material is preferable to metal for the projections, because wood reduces danger of scratching where the foreign material being removed contains grit.

In the use of this cleaner the worker moistens the sponge strip, applies it over the windshield with relatively light pressure and then increases the pressure to bring the series of diagonal projections into contact with the glass, whereupon continued wiping movement causes the side walls of the projections to engage and dislodge all adhering foreign matter. Further application of the sponge will wash the glass preparatory to the usual drying and polishing with a moist chamois.

Having described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A windshield cleaner for use by oil station attendants comprising a block having a longitudinally extending hand grip on one side and on the opposite side thereof a longitudinally extending sponge strip and in closely adjacent relation thereto a series of non-metallic projections separated by grooves and having such relation that either the sponge or the projections or both may be brought to bear on the windshield by changing the angle of the cleaner in the hand of the attendant.

2. A device of the class described comprising a block having a longitudinally extending hand grip on one side and on the opposite side thereof a wetting member and in closely adjacent relation thereto a plurality of non-metallic projections separated by grooves and having such relation that either the wetting member or the projections or both may be brought to bear on the surface to be cleaned by changing the angle of the cleaner in the hand of the user.

3. A cleaning tool adapted to apply wetting material and then to scrape off the wetted sub-

stance, said tool comprising a block having a hand grip extending longitudinally of one side and having on the side opposite the hand grip an upwardly extending wetting member, said tool
5 further being provided in laterally spaced relation to said wetting member with non-metallic scraping means having an acting face in a sub-

stantially lower plane than that of the wetting member and so related thereto that either the wetting member or the scraping means or both may be brought to bear on the surface to be cleaned by tipping the cleaner transversely of
6 said hand grip in the hand of the user.

ROBERT BULLEIGH.