Aug. 22, 1950 E. M. VOELKER ET AL 2,519,946

SCRAPER

Filed Jan. 25, 1947

Fig 1

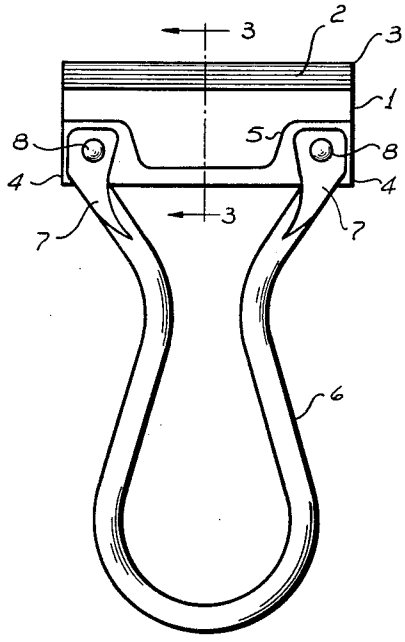


Fig 3

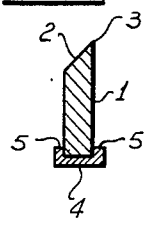
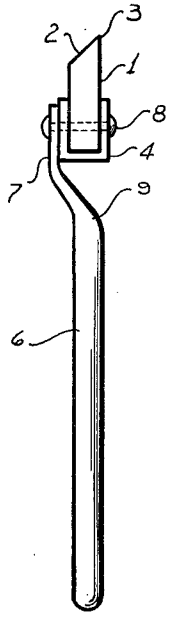


Fig 2



INVENTOR
EDWARD MORGAN VOELKER
JOHN W. SABBAGH
BY
Cornelius Fabricius
ATTORNEY

Patented Aug. 22, 1950 2,519,946

UNITED STATES PATENT OFFICE

2,519,946

SCRAPER

Edward M. Voelker, South Athol, Mass., and John W. Sabbagh, Jackson Heights, N. Y.

Application January 25, 1947, Serial No. 724,398

2 Claims. (Cl. 15—236)

1

This invention relates to scrapers and, while adapted for various purposes, is particularly intended for use as a scraper to remove ice and sleet from the windshields and windows of automobiles, trucks, etc. in the winter time.

Various forms of scrapers have heretofore been suggested for this purpose, some of which employ special blades, while others are adapted for the use therewithin of ordinary razor blades. These blades are usually of very hard metal and there is the ever present tendency in their use to scratch the glass of windshields and windows. Moreover, they are found in practice to quickly rust and fail to function properly in use.

The object of the present invention is to provide a highly efficient scraper of the character described, so constructed that it will be strong and durable, may be readily grasped and held firmly in the hand of the user, and so constituted that it cannot possibly scratch glass or any other material on which it is used.

The scraper of this invention is provided with a blade of an organic plastic, preferably Lucite, one longitudinal edge of which is beveled to a relatively keen scraping edge. The opposite longitudinal edge of the blade is set into a metallic channel section cut away for the greater portion of its length, so as to allow the blade to properly conform to the surface to be scraped and adjacent the opposite ends of the channel section are secured the opposite ends of a wire handle bent to form a relatively broad convenient grip. The ends of the wire handle are flattened to lie flat against one face of the channel section and rivets are passed through these flattened ends and through the channel section and the base of the blade to retain the parts in assembled relation. The handle is offset so that the portion thereof adapted to be gripped by the user lies in the same plane as the blade.

Features of the invention, other than those adverted to, will be apparent from the hereinafter detailed description and appended claims, when read in conjunction with the accompanying drawing.

The accompanying drawing illustrates one practical embodiment of the invention, but the construction therein shown is to be understood as illustrative, only, and not as defining the limits of the invention.

Figure 1 is a face view of the scraper embodying the present invention.

Figure 2 is an edge view of said scraper.

Figure 3 is a plane section on the line 3—3 of Figure 1.

2

In the drawings, 1 designates a blade which in practice is made relatively long and is beveled along its forward edge, as shown at 2, to provide a keen scraping edge 3. This blade is made of an organic plastic, preferably Lucite, which is sufficiently hard to effectually remove ice from windshields, etc., without scratching the glass thereof. The blade is made sufficiently thick to give it the necessary strength, but not so thick that it will be too rigid. We have found in practice that a blade $\frac{3}{16}$'' to $\frac{1}{4}$'' in thickness will operate with high efficiency.

The base of the blade is seated within a metallic channel section 4, the major portion of which is cut away intermediate the ends of the section, as indicated at 5, to permit some slight flexibility of the blade, so that its scraping edge may conform with the surface operated upon.

The handle 6 is made of relatively rigid wire bent into substantially U-shape with the sides thereof drawn in to better conform to the hand of the user. The ends of the wire handle are flattened, as indicated at 7, and are adapted to overlie one face of the channel section and rivets or bolts 8 passed through the flattened handle ends, through the channel section, and through the blade to permanently maintain the parts in assembled relation. The handle is offset, as shown at 9, so that the gripping portion of the handle lies in the same plane as the scraper 1.

The device of this invention is strong and rugged so that considerable force can be applied to the scraper blade, when occasion so requires, so as to insure a thorough cleaning of the glass on which it is used. The blade will retain its sharp edge for prolonged periods, but, in the event that it becomes dulled, it may be readily sharpened again by rubbing the bevel 2 thereof on sandpaper or by taking a light cut from the blade through the use of a plane or similar tool. The cut-out 5 permits the blade to adapt itself to slight irregularities in the surface to be scraped for it permits some flexibility of the blade in a longitudinal direction. At the same time the tapered end portions of the channel section which are not cut away sufficiently support the blade to permit of the application of such pressure thereto as may be necessary to remove obstructions, ice, etc.

The foregoing detailed description sets forth the invention in its preferred practical form, but the invention is to be understood as fully commensurate with the appended claims.

Having thus fully described the invention,

what we claim as new and desire to secure by Letters Patent is:

1. A scraper of the character described having a straight blade of relatively rigid organic plastic provided along its front longitudinal edge with a bevel to form a sharp scraping edge and perforated near its rear longitudinal edge and near its opposite ends, a rigid one piece channel of U-shaped cross section embracing the rear longitudinal portion of the blade and having in its flanges at the opposite sides of the blade perforations alined with those of the blade, a rigid one-piece looped wire handle with its integral free ends flattened and perforated to provide broad and flat ears seated against the outer surface of one of said flanges with their perforations alined with those of the channel and blade, and rivets passing through the alined perforations of the handle, channel and blade for permanently securing the handle, blade and channel in assembled relation.

2. A scraper of the character described having a straight blade of relatively rigid organic plastic provided along its front longitudinal edge with a bevel to form a sharp scraping edge and perforated near its rear longitudinal edge and near its opposite ends, a rigid one piece channel of U-shaped cross section embracing the rear longitudinal portion of the blade and having in its flanges at the opposite sides of the blade perforations alined with those of the blade, a rigid one-piece looped wire handle with its integral free ends flattened and perforated to provide broad and flat ears seated against the outer surface of one of said flanges with their perforations alined with those of the channel and blade, and rivets passing through the alined perforations of the handle, channel and blade for permanently securing the handle, blade and channel in assembled relation, said looped wire handle being offset back of the channel so that the major portion of the handle lies in the same plane as the blade.

EDWARD M. VOELKER.
JOHN W. SABBAGH.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
691,801	Palmer	Jan. 28, 1902
1,057,947	Dietz	Apr. 1, 1913
2,212,197	Roesch et al.	Aug. 20, 1940
2,265,551	Steccone	Dec. 9, 1941