

Mar. 13, 1923.

1,448,508.

G. E. THUM.
WINDSHIELD CLEANER.
FILED JAN. 29, 1920.

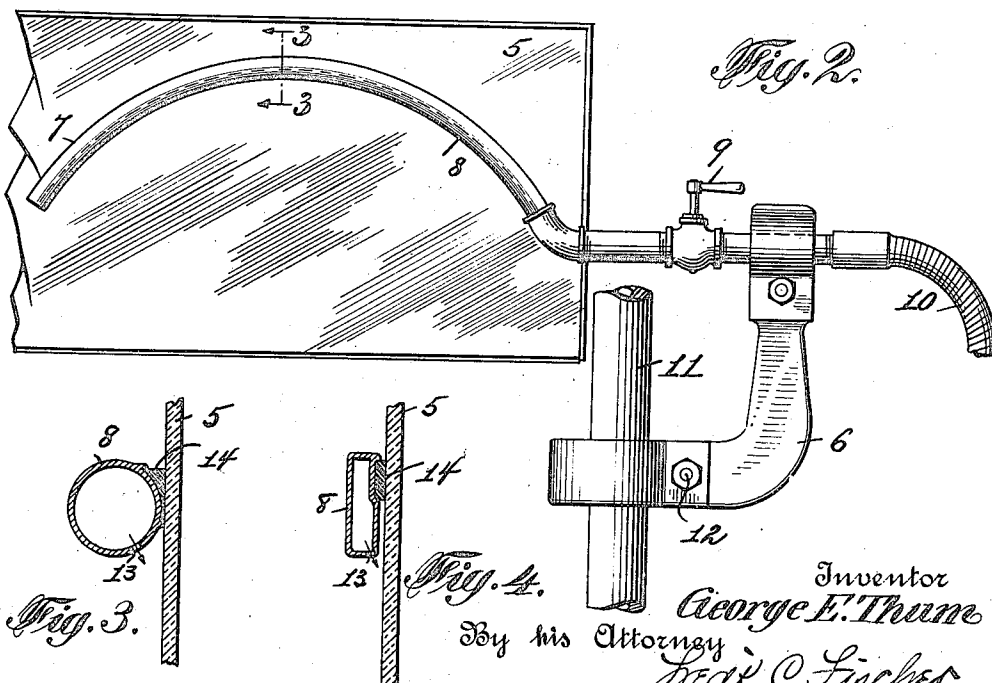
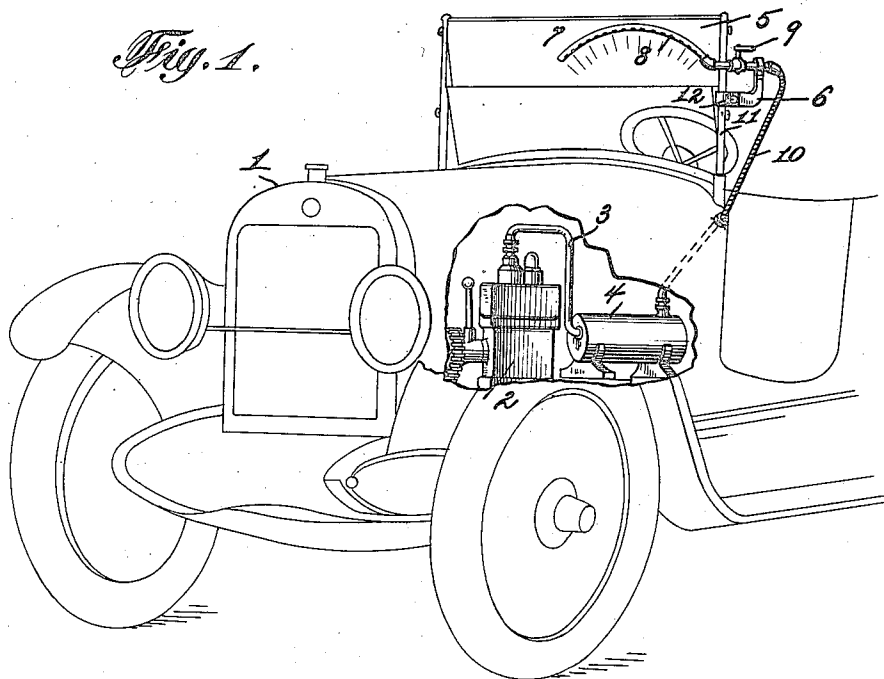


Fig. 3.

Fig. 4.

Fig. 4.

By his Attorney

Inventor
George E. Thorne
Frank C. Fischer.

UNITED STATES PATENT OFFICE.

GEORGE E. THUM, OF ELIZABETH, NEW JERSEY.

WINDSHIELD CLEANER.

Application filed January 29, 1920. Serial No. 354,792.

To all whom it may concern:

Be it known that I, GEORGE E. THUM, a citizen of the United States, residing in the city of Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Windshield Cleaners, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it pertains to make, construct, and use the same, reference being had to the accompanying drawings, and to numerals of reference marked thereon, forming a part of this specification.

The present invention relates to automobile wind shield and window cleaning devices, and the object of my invention is characterized by the provision of means in engagement with the wind shield of an automobile or window for directing a current of either hot or cold air against said wind shield or window to remove rain, snow or the like from the same, to prevent obstruction of the vision of the driver.

A further object of my invention is to provide a device which can be applied to any of the automobiles or street cars on the market, and which is simple and effective in construction, comparatively inexpensive in cost and durable in use.

While the preferred forms of my invention are illustrated in the accompanying drawings, yet it is to be understood that minor changes may be made without departing from the scope thereof.

In the drawings,

Figure 1 represents, in perspective, my improved device applied to an automobile.

Figure 2 represents, an elevation of the air conveying tube in engagement with the wind shield.

Figure 3 represents, a transverse section of the air conveying tube taken on line 3—3 of Figure 2 looking in the direction indicated by the arrow; and

Figure 4 represents, a modified form of the tube.

Similar characters of reference are employed in all of the above described views to indicate corresponding parts.

Referring now to the drawings, the reference character 1 indicates an automobile provided with an engine driven pump 2 of the Kellogg standard engine drive type, though, of course, the pump may be of any other desired or convenient form. Connect-

ed with the pump by means of an air supply pipe 3 is an air compression tank 4, of any convenient form.

Secured to the wind shield 5, by means of a bracket 6, is the wind shield cleaner 7 which in its preferred form consists of a perforated tube 8 closed at one end, the free or open end being connected with a suitable valve 9 to regulate the supply of air which is supplied by, preferably a flexible tube 10, which connects one end of the perforated tube 8 with the compression tank 4.

The bracket 6 is adjustably secured to the wind shield frame 11 by means of the connection 12 to provide means for raising or lowering the perforated tube 8.

The tube 8 in its preferred form is circular in cross section as illustrated in Figure 3 of the drawings, though, of course, this tube may be of any other convenient form as for instance, rectangular in cross section, as illustrated in the modified form shown in Figure 4, and provided with perforations 13 arranged so as to deflect the air at an angle against the wind shield.

A suitable packing of rubber or the like 14 is interposed between the wind shield and the tube 8 for practical purposes.

My wind shield cleaner is adapted for use in connection with street car and locomotive cab windows, and while I have herein shown a construction applied to an automobile wind shield, it is to be understood that the same may be applied to any window to remove rain, snow or the like in order to prevent obstruction of the vision.

Experience has demonstrated that the organization above described is a highly efficient one, and while I have shown the preferred embodiment of my present invention, I do not wish to be limited to the exact details of construction shown and described, as obvious modifications thereof, not involving the exercise of invention, may be made by any skilled mechanic, and such departures from what is herein set forth, I consider within the scope and terms of my claims.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent.

1. In a clear vision structure for vehicles, the combination of a transparent member, an apertured tube, packing interposed between said member and said tube, and means for adjustably holding said tube associated

with said member, the tube having a recessed portion to receive and retain said packing in position, and said aperturing being spaced from said recessed portion and directed toward said transparent member.

2. Means for keeping the window of a vehicle clear, comprising a tube having one of sides apertured to permit the discharge of a cleaning fluid, said side being provided with a recessed portion spaced from said ap-

erturing, packing projecting from said recessed portion, and means for adjustably securing said tube in association with the window with the packing in contact therewith.

This specification signed and witnessed this 22nd day of January, 1920.

GEORGE E. THUM.

Witnesses:

FERDINAND NOLL,
FRED'K C. FISCHER.