Jan. 7, 1936. F. J. WYSCAVER 2,027,009

TOOL FOR OPENING AUTOMOBILE DOORS

Filed March 14, 1934

Fig. 1.

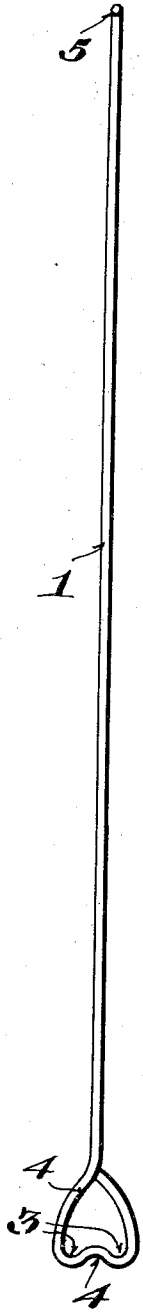


Fig. 2.

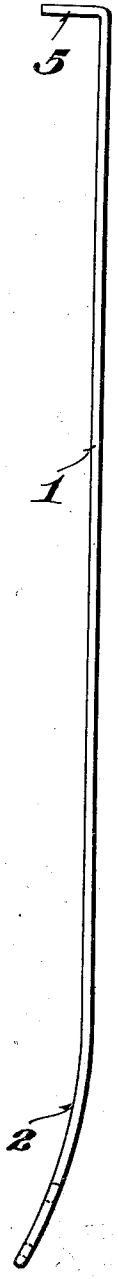


Fig. 4.

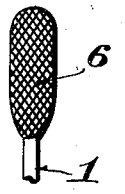
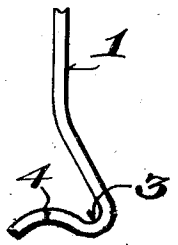


Fig. 3.



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TOOL FOR OPENING AUTOMOBILE DOORS

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3 Claims. (Cl. 81—3)

This invention relates to tools for opening automobile doors; and it comprises a rod having a length sufficient to reach from the floor boards of an automobile to an interior door handle and being provided with a means for pushing and pulling such a handle, said means comprising a loop having at least one hook-shaped portion for pulling said handle and a reversely bent section for pushing said handle, the rod also usually having at least one curved section adjacent the pushing and pulling sections of the rod; all as more fully hereinafter set forth and as claimed.

The automobile service station is frequently called upon to open the locked doors of closed cars, the keys of which have been lost or are not available. It also frequently happens that door locks become frozen and door handles become broken either by accident or by persons attempting to break into such cars. In all such cases the service man is called upon to open a locked door without the use of the key belonging thereto. The present invention supplies a tool by means of which a locked car door can be readily opened without the use of a key and without damaging the car in any way.

At present most service stations carry a large assortment of keys for use in the emergency opening of locked car doors. If no key is found which will open the locked door, it has heretofore been customary for the service man to remove the pins from the door hinges and then to pull the door open from the side to which the hinges are attached, the door as a whole being removed from the car. Some service men make a practice of breaking the glass in the door in order to reach an inside door handle. Needless to say these prior methods are highly objectionable as well as time consuming.

Practically all of the modern closed cars are provided with locks which are operated by the inside door handles, by raising or lowering them beyond their normal operating positions. Other cars are locked by the setting of a separate lever or button. In all of these cases the doors are unlocked either by the pushing or by the pulling of a lever or of the inside door handle. I have found that car doors, provided with locks of this type, can be readily opened without damaging the car in any way and almost as easily and effectively as if the key belonging thereto were available. This is accomplished by means of an extremely simple but effective tool which will now be described.

In the accompanying drawing I have shown alternative embodiments of my tool which fall within the purview of my invention. In this showing

Fig. 1 shows one embodiment of my tool in elevation,

Fig. 2 represents a side view of the embodiment shown in Fig. 1,

Fig. 3 represents a view on an enlarged scale of an alternative operating end which may be employed in connection with my tool, while

Fig. 4 shows an alternative form of handle for my tool.

In the figures like parts are designated by like reference numerals. All forms of my tool are provided with a long shank 1 of sufficient length to reach from the floor boards of an automobile to an inner door handle or locking lever. This shank is usually provided with a curved or bent section shown at 2 in Fig. 2 a short distance from the pushing and pulling means. The tool may be made double-ended or single-ended. In any case at least one operating end is provided with a loop having at least one hook-shaped portion 3, serving as means for pulling a door handle or unlocking lever, and with a reversely bent section 4, serving as a means for pushing such a handle or lever. When my tool is provided with only one operating end the other end is usually provided with some kind of a hand grip. This may take the form of a simple bent section, as shown at 5 in Figs. 1 and 2 or a more elaborate knurled hand grip may be provided as shown at 6 in Fig. 4.

The operation of my tool is extremely simple. It is only necessary to lift up the hood of the automobile, to thrust the operating end of the tool through one of the openings in the floor boards, such as the opening for the clutch or brake pedals, or the opening around the steering shaft. If there is a floor mat over these openings this can be readily pushed out of the way by the tool to permit entrance thereof. The operating end of the tool is then engaged with the door handle or locking lever and this is pushed, pulled or raised, as the case may be, thereby unlocking the door. The operator can look through the wind shield while manipulating the tool; hence there is no difficulty involved in contacting the operating end with the door handle or lever. If necessary the end of the tool can be bent to reach around any obstruction. In general the bend usually provided near the operating end is sufficient to reach around window sills or to reach handles or levers which are recessed.

For the present day motor cars the shank of my tool should range in length from about 32 inches

up to 4½ feet. The bend is advantageously located from about 3 inches to 12 inches back of the operating end of the tool. The operating end should, of course, be made sufficiently small to readily pass through the usual openings provided in the floor boards. I usually provide a heart-shaped loop or a section of such a loop having a diameter of about 2 inches at the operating end. This dimension may range from about 1 to 3 inches as a rule. The shank should be stiff although capable of being bent. It may be made of brass, hard copper, soft iron or steel or other metal of similar nature. A rod or tube having a diameter of from about ⅛ to ¼ inch is satisfactory. The whole tool can be made from such a rod or separate and usually interchangeable operating ends may be provided. These interchangeable ends may be made of different sizes and shapes to suit the requirements of certain special cars.

Various changes may be made in my tool without departing from the scope of the present invention. The operating end or ends may be made of any convenient size or shape so long as they are provided with sections suitable for pulling or pushing door handles and operating levers.

Various types of handles may be provided. Other modifications which come within the scope of the following claims will be immediately evident to those skilled in the art.

What I claim is:

1. A tool for opening automobile doors comprising a stiff but bendable rod having a length sufficient to reach from the floor boards of an automobile to an inner door handle and being provided with means for pushing and pulling an inner door handle, said means comprising a loop having at least one hook shaped portion for pulling said handle and a reversely bent section adapted for pushing said handle.

2. The tool of claim 1 wherein said pushing and pulling means comprises two hook-shaped portions for pulling said handle with an intermediate reversely bent section for pushing said handle.

3. The tool of claim 1 wherein the shank is provided with a bent section a short distance from the pushing and pulling means.

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