G. B. MESS.
TOOL FOR REMOVING VALVE PARTS.
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1,277,454.

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To all whom it may concern:

Be it known that I, George B. Mess, a citizen of the United States of America, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Tools for Removing Valve Parts, of which the following is a specification.

The present invention relates to tools and consists in the combinations and arrangements of elements hereinafter described and particularly set forth in the accompanying claims.

The invention has for its purpose to provide a tool of this character particularly adapted for use on internal combustion engines of the valve-in-the-head type for removing certain parts of the valve actuating mechanism; and one which may usefully serve in various other ways.

Another object of the invention is to produce a tool for the purposes above stated which is simple in construction, cheap to produce, and which may be used without requiring any special skill.

The invention is disclosed by way of illustration in the accompanying drawing wherein the figure is a perspective view of the tool.

Referring to the construction of the article in further detail, the same consists of a bar 1 of tool steel, or other suitable metal of convenient length for handling and whose dimensions in cross-section are sufficient to withstand the uses to which the tool would be ordinarily put. The body of the bar 1 is of polygonal design in cross-section whereby the surfaces 2 thereof will afford suitable working faces to be engaged by a wrench for turning the tool when occasion requires.

One end of the bar 1 is appreciably flattened at 3 and formed to provide a hook-shaped member 4, and said hook is disposed at right angles to the body of a bar and has for its function to engage with the rocker arm of the valve to remove the push rod of said valve. In its application the hooked member is placed beneath the rocker arm and through the leverage afforded by the length of the bar 1 sufficient tension may be exerted against the spring of said valve arm to easily disconnect the rocker arm from its actuating member.

The opposite end 5 of the bar is flattened and tapered on opposed surfaces and the 55 extreme end thereof is cut away or bifurcated as at 6 to provide the pair of wedge-shaped members 7 as shown. The function of the two members 7 is to engage with the tensioning spring of the valve, and the space 60 between said members affords the necessary clearance for the valve stem. In operating the members 7 are inserted between the coils of the spring, and by sufficient leverage of the bar 1 the valve and its cage 65 may be removed.

Another purpose to which the hooked end 4 of the tool may be put is that for turning a wing-nut when the latter is located in an inaccessible place or requires great strength to be moved. In such an instance the bifurcated end is simply placed in position to engage the wing members of the nut, and a wrench applied to the bar when the bar may be turned as will be understood.

The bar 1, or handle of the tool, is of polygonal design in cross-section, to the end that the same may be manipulated by the use of a wrench, as will be understood. Also, the terminating end of the hook portion 4 is at a point immediately offset from the juncture of the initial hook portion and the handle.

Another purpose to which the members 7 of the tool may be put is that of using either or both of said members in the capacity of a screw-driver when the tool shall be engaged is of such dimensions that said members 7 may be inserted therein. In this instance also the bar may be turned through the instrumentality of a wrench.

It is obvious that those skilled in the art may vary the details of construction and arrangement of parts without departing from the spirit of my invention, and therefore I do not wish to be limited to such features except as may be required by the claims.

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

1. A tool of the character described comprising a handle having one end thereof provided with a hook portion, said hook portion being substantially of semi-circular design and disposed substantially at right angles to the central longitudinal axis of said handle, the end of said hook terminat-
ing at a point immediately offset from the juncture of the initial hook portion and the handle, substantially as set forth.

2. A tool of the character described comprising a handle of polygonal design in cross-section whereby to be gripped by a manipulating tool, said handle having one end thereof provided with a hook portion substantially of semi-circular design and disposed at right angles to the central longitudinal axis of said handle, substantially as set forth.

In testimony whereof I affix my signature in the presence of a witness.

GEORGE B. MESS.

Witness:

CIA., E. RIOBAIN.