G. W. WILSON.

VALVE LIFTING TOOL.

APPLICATION FILED JULY 23, 1920.

1,380,508. Patented June 7, 1921.

Fig. 1.

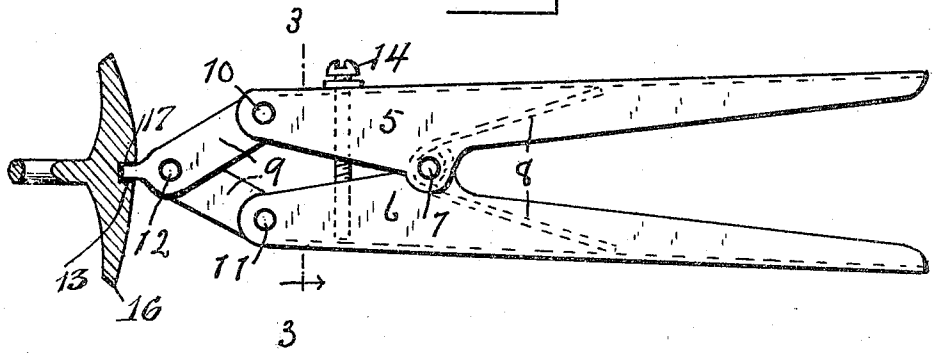


Fig. 2.

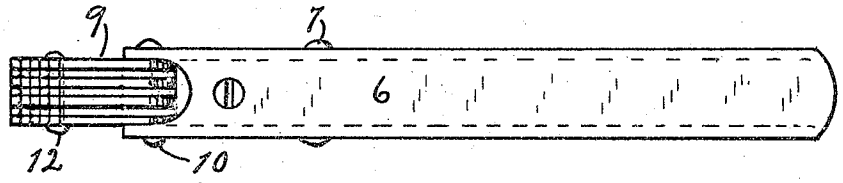


Fig. 4.

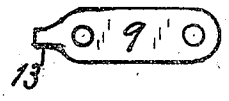
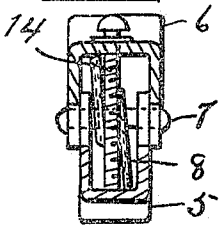


Fig. 3.



George W. Wilson
Inventor
By Darpham
Attorney

UNITED STATES PATENT OFFICE.

GEORGE W. WILSON, OF LOS ANGELES, CALIFORNIA.

VALVE-LIFTING TOOL.

1,380,503. Specification of Letters Patent. Patented June 7, 1921.

Application filed July 23, 1920. Serial No. 398,412.

To all whom it may concern:

Be it known that I, GEORGE W. WILSON, a citizen of the United States, residing at the city of Los Angeles, county of Los Angeles, State of California, have invented new and useful Improvements in Valve-Lifting Tools, of which the following is a specification.

My invention relates to tools for handling the valves of a gas engine and the object thereof is to provide a simple, and effective tool by means of which a valve can be quickly removed from its seat.

In the drawings forming a part of this application Figure 1 is a side elevation of my tool positioned for removing a valve, a portion of which is shown in section and a part omitted. Fig. 2 is a plan view of the tool. Fig. 3 is a section on the line 3—3 of Fig. 1. Fig. 4 is a view of one of the lifting blades detached.

Referring to the drawings my tool consists of the handle members 5 and 6 which are connected by the pivot 7 on which spring 8 is mounted to hold the handles normally in the position shown in Fig. 1. In the front end of the handle members are mounted the lifting blades 9 by means of pivots 10 and 11. In the tools made and sold by me I mount four blades in one member and three blades in the other member, but a greater or less number may be used.

The blades of the handle members are connected by pivot 12 and terminate in lifting points 13, which are adapted to enter the usual kerf in the top of the engine valve. One of the handle members is provided with a screw 14, which may have a lock nut 15 thereon. Screw 14 is adjusted to engage the other handle member when lifting points 13 are in alinement and is then locked by nut 15.

When it is designed to remove a valve 16 from the engine the lifting points are placed in the valve kerf 17 and the operator presses on the outer ends of the handle members thereby causing the lifting points of the blades to separate, those in one handle member moving in one direction and those in the other handle member moving in the other direction which causes the points to grip and firmly hold the valve which is then removed from its seat in the well known manner.

Having described my invention I claim:

1. A valve lifter comprising a pair of handle members pivotally connected; lifting blades, having points for engaging the kerf of the valve pivotally connected to said handle members, said blades being connected at their other ends.

2. A valve lifter comprising a pair of handle members pivotally connected; lifting blades, having points for engaging the kerf of the valve pivotally connected to said handle members at one end and pivotally connected together at the other end; and means to normally keep the points of said blades in alinement.

In witness that I claim the foregoing I have hereunto subscribed my name this 12th day of July, 1920.

GEORGE W. WILSON.