V. G. LOCKWOOD.

TOOL FOR DETACHING PUPPET VALVES OF MOTORS.

APPLICATION FILED MAY 14, 1917.

1,268,480. Patented June 4, 1918.

Fig. 1.

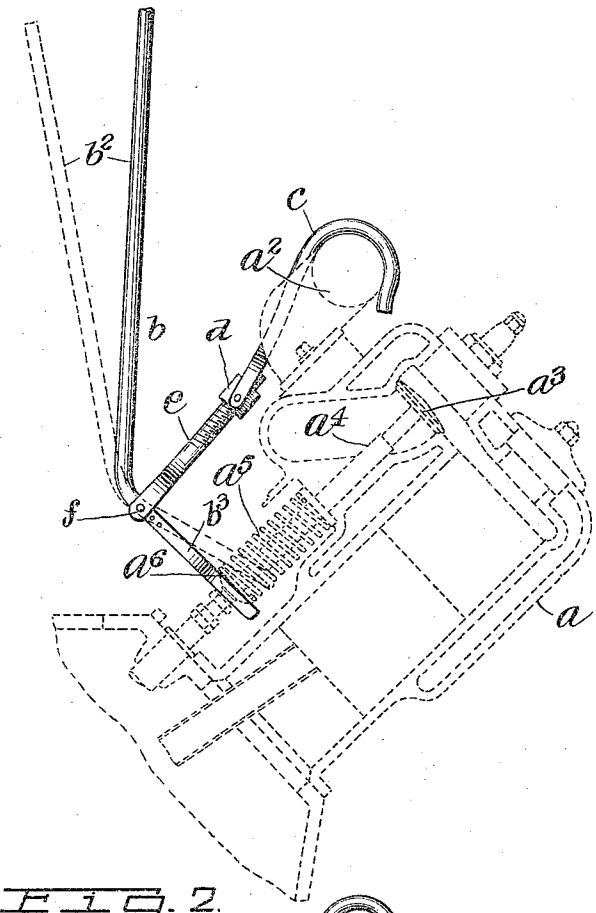


Fig. 2.

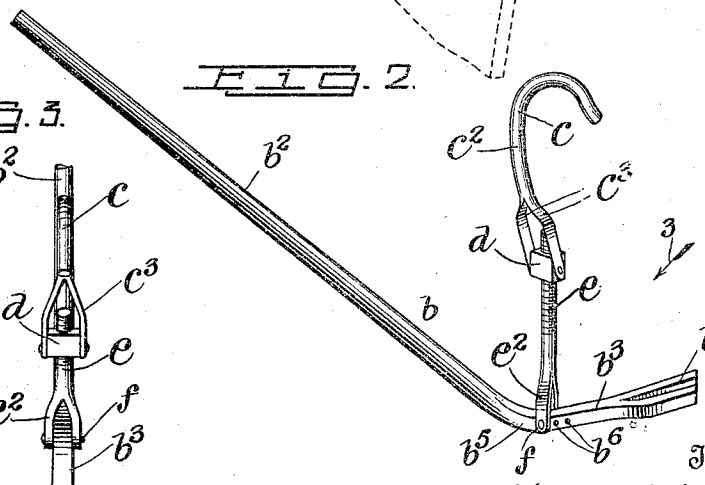


Fig. 3.

Inventor

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By his Attorneys

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UNITED STATES PATENT OFFICE.

VERNON G. LOCKWOOD, OF SAUGERTIES, NEW YO

TOOL FOR DETACHING PUPPET-VALVES OF MOTORS.

1,268,480. Specification of Letters Patent. Patented June 4, 1918.

Application filed May 14, 1917. Serial No. 168,355.

To all whom it may concern:

Be it known that I, VERNON G. LOCKWOOD, a citizen of the United States, and residing at Saugerties, in the county of Ulster and State of New York, have invented certain new and useful Improvements in Tools for Detaching Puppet-Valves of Motors, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to tools for use in detaching the puppet valves of motors, and the object thereof is to provide an improved device of this class particularly designed for use in connection with what are known as V-type motors, and with this and other objects in view the invention consists in a device of the class specified, constructed and operated as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawing forms a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which:—

Figure 1 is a view indicating the method of using my improvement in connection with a motor of the class specified;

Fig. 2 a perspective side view of my improvement; and,

Fig. 3 a view looking in the direction of the arrow 3 of Fig. 2.

In the drawing forming part of this specification, I have indicated at a one cylinder of what is known as a V-type motor, said motor being provided with an exhaust pipe a^2 and with a puppet valve a^3 having a stem a^4 on which is mounted the usual tension spring a^5 which rests upon and bears upon a collar or seat a^6 mounted on the valve stem and movable thereon but held against downward movement by a key or otherwise, all of this construction being old and well known and forming no part of my invention.

My improved tool b comprises a handle portion b^2 provided at one end with a jaw member b^3 which projects at an angle thereto, and which is provided with a fork b^4.

My improved tool also comprises a hook member c which is adapted to engage the exhaust pipe a^2 of the motor, or be placed in connection therewith as shown in Fig. 1, and said hook is provided with a shank portion c^2 having a fork c^3 which is pivoted to a screw block d mounted on a threaded rod e having a fork e^2, and the rod e is connected with the elbow portion b^5 of the handle b^2 of the tool by means of a pin f passed through the block e^2 and through said elbow portion of the handle of the tool, and the said elbow portion of the handle of the tool, or the shank portion of the jaw b^3, or both of said parts are or may be provided with a number of spaced transverse perforations b^6 through which the pin f may be passed, and by means of this construction the connection of the rod e with the handle portion of the tool, or the shank of the jaw b^2 thereof may be adjusted as will be readily understood.

It will also be understood that the screw block d may be adjusted on the rod e by simply turning said block, and in this way the length of the hook member and its connection with the handle and jaw portion of the tool may also be adjusted, as will be readily understood, by simply turning the hook c.

In the use of this device for the purpose set out, the hook c is first connected with, or engaged with the exhaust pipe a^2, as indicated in Fig. 1, after which the handle b^2 is manipulated so as to pass the fork b^4 beneath the collar a^6 as is also indicated in Fig. 1, and then, by moving the handle b^2 into the position indicated in dotted lines in said figure, the spring a^5 with the collar a^6 will be lifted and the key of the collar a^6 may be detached or removed in the usual manner, after which the valve a^3 may be removed from the motor and repaired, refinished or ground as may be desired, or a new valve may be substituted for the old one.

Although I have shown and described my improved tool as designed particularly for use in connection with what is known as a V-type motor, my invention is not necessarily limited to motors of this class and may be employed for various other purposes, or in connection with other motors, if desired, and although I have shown and described the preferred form of my improvement and the method of operating the same, my invention is not limited to the details of construction herein shown and described,

and changes therein and modifications thereof may be made, within the scope of the appended claims without departing from the spirit of my invention or sacrificing its advantages.

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

1. A tool of the class described, comprising a handle portion provided with a jaw member having a forked head, said jaw member being arranged at an angle to the handle portion, a rod adjustably pivoted to the jaw member adjacent to the point where it connects with the handle portion, a block adjustable on said rod and a hook device pivoted to said block.

2. A tool of the class described comprising a handle portion provided with a jaw portion, said jaw portion being arranged at an angle approximately 130° to the handle portion, a threaded rod pivoted to said jaw portion adjacent to the point where it connects with the handle portion, a threaded block mounted on said rod and a hook device pivoted to said block.

3. A tool of the class described, comprising a handle portion provided with a jaw portion, said jaw portion being arranged at an angle to the handle portion, a threaded rod provided with a forked end which is adjustably connected with said jaw portion adjacent to the point where it connects with the handle portion, a block adjustably mounted on the threaded portion of said rod and a hook device provided with a forked end which is adapted to be pivoted to said block.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 11th day of May, 1917.

VERNON G. LOCKWOOD.

Witnesses:
C. E. MULREANY,
H. E. THOMPSON.