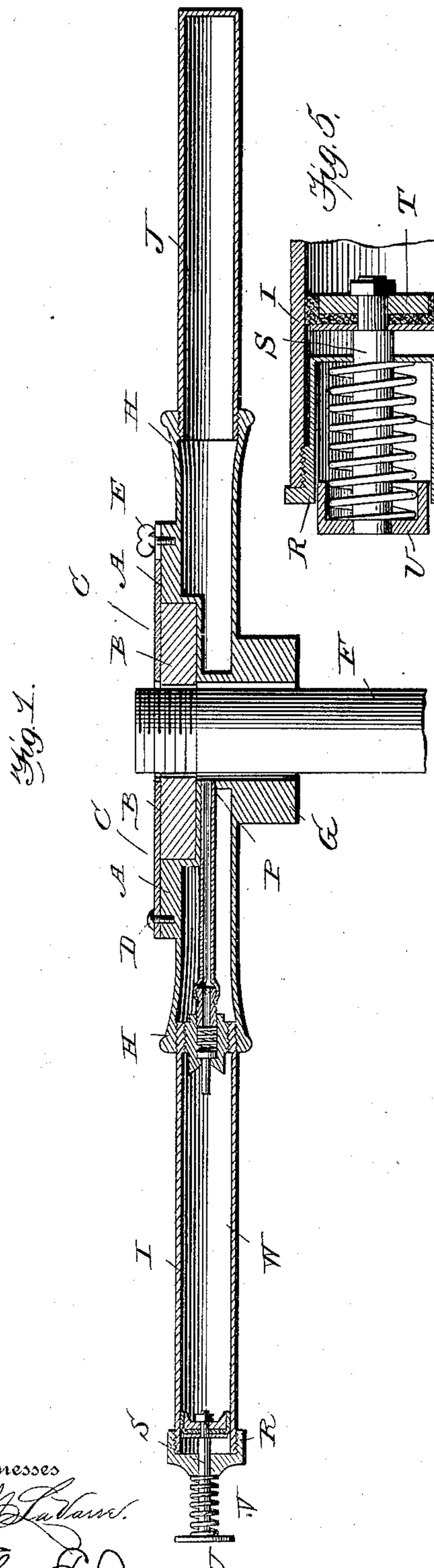
No. 613,150. Patented Oct. 25, 1898.

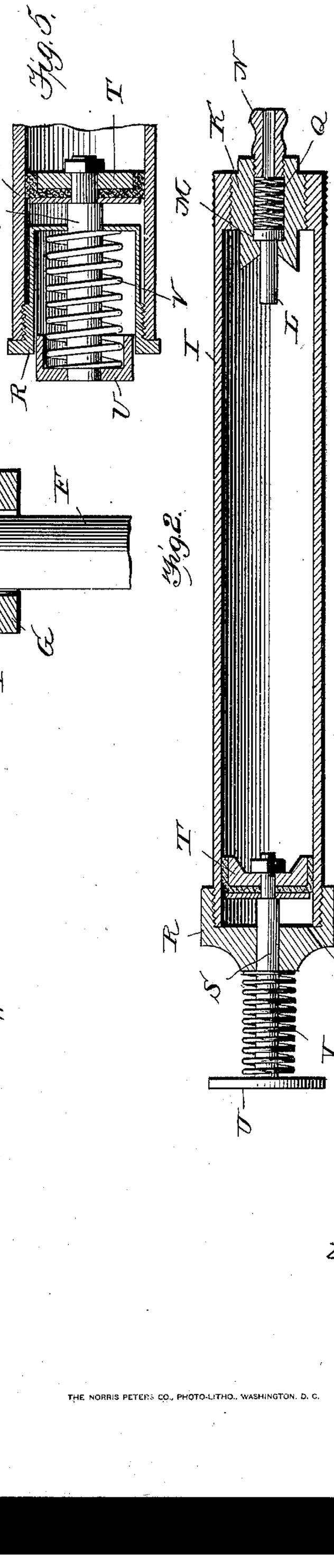
W. A. JENKINS.

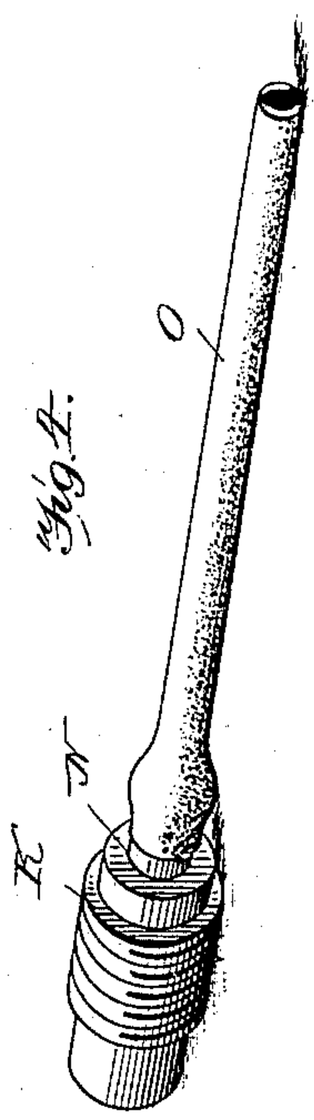
STOCK OILER.

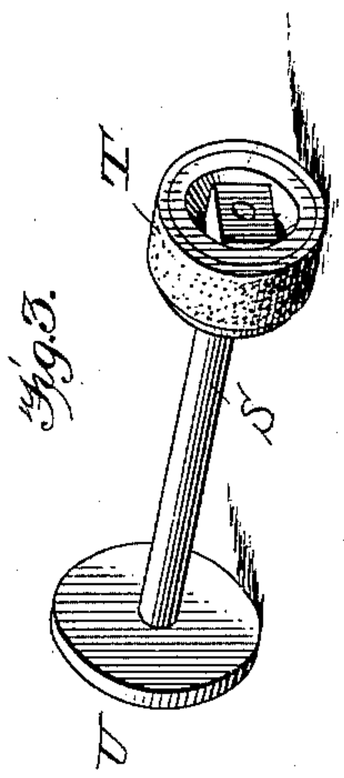
(Application filed Sept. 28, 1897.)

(No Model.)









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UNITED STATES PATENT OFFICE.

WILLIAM A. JENKINS, OF JACKSON, MISSISSIPPI, ASSIGNOR OF ONE-HALF TO JOHN E. JENKINS, OF McCOMB, MISSISSIPPI.

STOCK-OILER.

SPECIFICATION forming part of Letters Patent No. 613,150, dated October 25, 1898.

Application filed September 28, 1897. Serial No. 653,347. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. JENKINS, residing at Jackson, in the county of Hinds and State of Mississippi, have invented a new and useful Stock-Oiler, of which the following is a specification.

My invention relates to stocks for holding dies for cutting threads on bolts or pipes by hand, and has for its object to furnish such stocks with attached oilers, whereby the dies, the bolt, and the thread being cut may be oiled during the operation of cutting without the necessity of using a separate oiler.

With this object in view my invention consists in certain improvements in the details of construction and in the arrangement and combination of the parts composing the die-stock, as will be hereinafter fully described, and afterward specifically pointed out in the claim.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical longitudinal sectional view of a stock and dies constructed in accordance with my invention in position to operate upon a bolt or pipe. Fig. 2 is a similar view, on an enlarged scale, of one of the handles detached. Fig. 3 is a detail perspective view illustrating the ejection-plunger detached. Fig. 4 is a detail perspective view illustrating the hollow discharge-plug and discharge-tube detached. Fig. 5 is a view of a slightly-modified construction of the plunger and its connections.

Referring to the drawings by letters, A is the stock, provided with a suitable box or receptacle to receive the screw-cutting dies B B, said dies being retained in position by a cap C, attached to the stock by screws D E, the cap C being adapted to be turned on the screw D to uncover the die-box and the screw E being a thumb-screw for convenience in inserting and removing it for securing or removing the dies from the box.

F represents the pipe or bolt to be threaded by the dies, it being shown in Fig. 1 in the proper position to be operated upon, the guide-stock being provided with a guide-sleeve G to properly center the pipe or bolt in the dies. The stock is provided with oppositely-projecting sockets H, in which the operating-handles are to be threaded.

All the parts hereinbefore described may be of any well-known or approved construction, as they form no part of my invention, with the exception which will be hereinafter noted in reference to a discharge-opening through the stock to admit the oil to the dies and work.

I and J are the handles, which are usually made of a solid bar of metal; but in constructing a stock in conformity with my invention one or both of these handles may be hollow. In the drawings both are shown hollow; but this is not absolutely necessary, as one of them may be made solid, if desired.

In carrying out my invention I construct one of these handles to form an oiler; but, as hereinbefore stated, both handles may be so constructed, although but one oiler is necessary and two would probably not be desirable. In the drawings I have shown the handle I constructed to form the oiler and the handle J formed hollow, with its end closed. The construction of the handle J is a matter of indifference, as it might be made with its outer end open or with such an open end provided with a plug, leaving an interior receptacle for any small articles the operator might desire to place therein. It is probable that the better way to construct the handle J when the handle I is formed into an oiler would be substantially as shown in Fig. 1, it being made hollow rather than solid to more nearly balance the weight of the handle I. The handle I at the stock end has an interior thread to receive the exterior thread of a hollow plug K, the bore of which is contracted at the inner end to receive the stem L of a check-valve M, while the other end of the bore of said plug is threaded to receive a nozzle N, upon which is placed a section of rubber tubing O, which when extended just reaches the interior of the stock through a discharge-port P therein. A spring Q is seated between the valve M and nozzle N, which serves to normally hold the check-valve to its seat in its inner or closed position.

The outer end of the handle I is closed by a screw-cap R, through which a rod S passes, carrying on its inner end, inside of the handle I, a plunger or piston T, and on its outer end a flat disk-head U, for convenience in operation. A spring V, coiled around the rod S, has its bearing between the outer end of the screw-cap R and the inner side of the disk U and serves to normally hold the plunger in its outer position. The interior of the handle I forms an oil chamber or reservoir W. In Fig. 1 I have shown the screw-cap R as secured upon the outer surface of the handle I, while in the modification shown in Fig. 5 I have shown the said screw-cap as secured on the inside. This modification, with the other slight change in the construction of the disk U, as shown in said Fig. 5, permits of the covering or concealing of the spring V.

The operation of my invention may be described as follows: When the stock is in position for cutting threads, as shown in Fig. 1, and it is desired to oil the dies and work, it is only necessary to press the thumb or finger against the disk U and force the plunger T slightly inward against the action of the spring V. This will cause the check-valve M to open downward and a small quantity of oil to be discharged through the nozzle N, tube O, and discharge-port P upon the work at the point where the dies are operating. The release of the disk U will permit the spring V to again return the plunger T to its outer position, part of the air behind the plunger escaping through a small channel X, provided through the cap R for that purpose, and part past the plunger into the cylinder to take the place of the expelled oil, the check-valve preventing the entrance of air through the discharge-tube and maintaining said tube always full of oil. As soon as the outward pressure upon the check-valve ceases the spring Q will return it to its seat and close it, thus preventing further discharge or leakage of oil.

The advantages attending the use of my invention will be obvious from the foregoing description. It dispenses with the necessity of having to stop work to apply oil from an oil-can, which is generally a very dirty arrangement and a nuisance to every machinist, plumber, or steam-fitter, being further objectionable on account of the fact that oil applied from a can seldom, if ever, strikes the right spot.

My invention may be applied to a stock at a nominal cost, and by placing the oil at the necessary point economy in the use of oil is assured. It is unnecessary to stop cutting the thread until it is entirely completed, and much time is saved which has often heretofore been wasted in looking about the shop for a misplaced oil-can.

While I have illustrated and described what I believe to be the best means known to me for carrying out my invention, I do not wish to be understood as limiting myself to the exact construction and arrangement shown and described, but hold that such slight changes and variations as might suggest themselves to the ordinary mechanic would properly fall within the limit and scope of my invention.

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

A die-stock having a hollow handle forming an oil-cylinder, provided with an air-vent at its outer end and a discharge-tube leading from its inner end to the dies, an inward-opening spring-closed valve in the inner end of the discharge-tube, a plunger or piston in the outer end of the cylinder, constructed to permit the passage of air and at the same time prevent the escape of oil, and a spring tending to normally maintain the plunger or piston in its outer position, substantially as described.

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