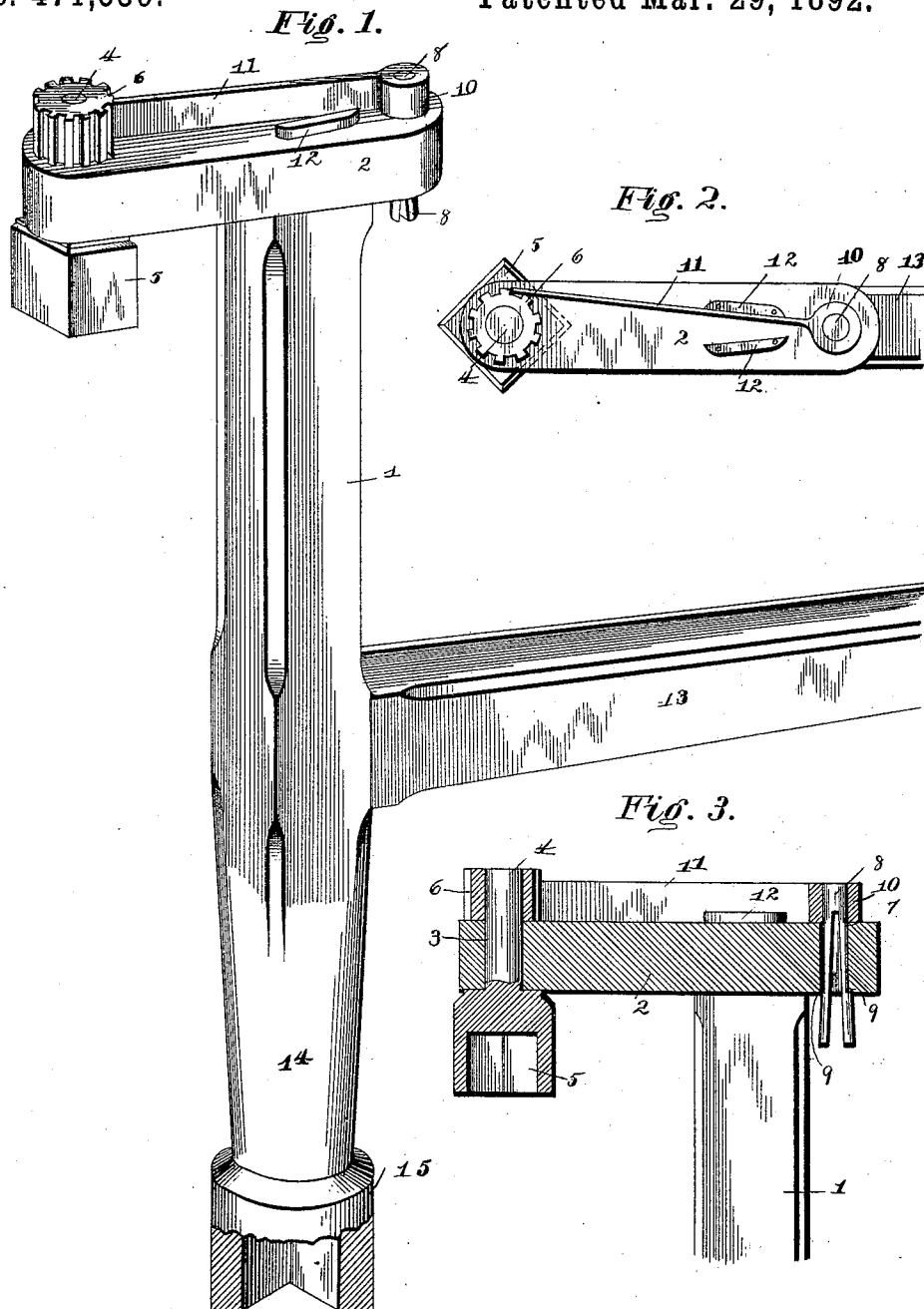


(No Model.)

J. S. EVERITT.
WRENCH.

No. 471,539.

Patented Mar. 29, 1892.



Witnesses:

Chas. A. Ford.

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UNITED STATES PATENT OFFICE.

JOHN SNIDER EVERITT, OF JEWELL, IOWA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 471,539, dated March 29, 1892.

Application filed November 2, 1891. Serial No. 410,655. (No model.)

To all whom it may concern:

Be it known that I, JOHN SNIDER EVERITT, a citizen of the United States, residing at Jewell, in the county of Hamilton and State of Iowa, have invented a new and useful Wrench, of which the following is a specification.

This invention relates to improvements in wrenches; and the objects in view are to provide a wrench of the ratchet pattern especially adapted by its construction for operating upon the nuts of bolts employed in cylinders of thrashing-machines, and by the employment of such wrench to obviate the necessity of reaching into the cylinder for this purpose.

With these main objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a perspective of a wrench constructed in accordance with my invention. Fig. 2 is an end view. Fig. 3 is a longitudinal section of the head of the wrench.

Like numerals of reference indicate like parts in all the figures of the drawings.

The stock of the wrench consists of a straight bar 1, at one end of which is located a cross-head 2, the ends of which are at opposite sides of the stock. The longer end of the cross-head is provided near its extremity with a bearing-opening 3, and in the same is loosely journaled the cylindrical spindle 4, formed upon the upper end of a nut-receiving socket 5. Above the cross-head a ratchet-wheel 6 is mounted on the spindle and also serves as a means for retaining the spindle in its bearing. The shorter end of the cross-head is provided with a perforation 7, and in the same is removably inserted a split key or pin 8, the opposite bifurcations of which are shouldered at their outer sides, as at 9, to prevent accidental disengagement from the cross-head. By pressing the terminals or bifurcations of the key together, however, said key may be withdrawn from the opening of the cross-head. To the upper end of the key above the cross-head there is secured the eye 10 of a spring-pawl 11, the free end of which takes into the teeth of the ratchet-wheel 6 at either side thereof. Upon the head diverging stops 12 are formed, and the spring-pawl may be disposed or lo-

cated against either of said stops, so as to take against either side of the ratchet-wheels, and hence adapt the wrench to operate either as a right or left hand wrench for the purpose of applying or removing nuts. This completes the construction, with the exception of a handle-lever 13, which is secured to the stock above its lower or handle portion 14, and, like the latter, is adapted to be grasped by the hand of the operator during the process of manipulation.

In operation the socket is introduced over the head of the nut, the lower end of the stock grasped by one hand and the outer end of the handle-lever by the other hand, when, by vibrating or swinging the handle-lever back and forth, the nut may be manipulated either for the purpose of applying or withdrawing the same from the bolt, in accordance with the location of the pawl 11 with relation to the ratchet-wheel. For instance, by compressing the bifurcations of the key and removing the same and reinserting the key so that the pawl at its free end will take at the left side of the ratchet-wheel said wrench will be then adapted for applying a nut, and by again withdrawing the pin and reapplying the same and the pawl at the opposite side of the ratchet-wheel the wrench will be adapted for removing the nut.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I have provided a cheap and simple ratchet-wrench adapted to apply and withdraw the nuts from bolts employed in the cylinders of thrashing-machines, and by such provision all necessity of reaching into the machine for this purpose is avoided.

That end of the bar 1 that serves as a handle 14 is provided with a socket 15, adapted to fit the teeth of the cylinder of the thrasher, and hence designed to serve as a wrench in applying and removing the same.

Having described my invention, what I claim is—

In a wrench of the class described, the combination, with the stock terminating at one end in a handle and provided above the same with a handle-lever and at its handle portion having a socket adapted to fit a cylinder-tooth, of a cross-head connected with the opposite

end of the stock and extending at opposite
sides of the same and provided near its ex-
tremities with openings, a nut-receiving socket
having a spindle journaled in one of the open-
5 ings, a ratchet-wheel mounted on the opposite
end of the spindle, a bifurcated and should-
ered spring-key removably inserted in the
remaining opening, a spring-pawl secured to
the upper end of the key and adapted to en-
10 gage the teeth of the ratchet-wheel, and op-

posite stops located upon the cross-head, sub-
stantially as specified.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

JOHN SNIDER EVERITT.

Witnesses:

A. L. VAN DER VELDEN,
J. M. BLAKE.