W. Russell,

N<sup>2</sup>29,623.

V15 8. Patented Aug. 14, 1860.

Fig 1 C A. a Fig  $\bigcirc$   $\bigcirc$ a e. 9 A, C. Est d A. Inventor MmRussee per mung g actimizes Witnesses Ju Combs R. S. Spincer

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D C

## UNITED STATES PATENT OFFICE.

WILLIAM RUSSELL, OF STOUGHTON, MASSACHUSETTS.

WRENCH AND VISE.

Specification of Letters Patent No. 29,623, dated August 14, 1860.

## To all whom it may concern:

Be it known that I, WILLIAM RUSSELL, of Stoughton, in the county of Norfolk and State of Massachusetts, have invented a new 5 and Improved Implement or Tool, the Same being a Combined Wrench and Vise; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed draw-10 ings, making a part of this specification, in which-

Figure 1 is a side view of my invention when used as a vise. Fig. 2 a side view of the same when used as a wrench.

Similar letters of reference indicate cor-15

responding parts in both figures. The object of this invention is to obtain a simple and small implement that may be used either as a wrench or vise, and is chiefly 20 designed for the use of farmers, and others

who require a few tools for general purposes.

The invention consists in having a jaw attached permanently to a bar at right angles and having a screw pass through the 25 said jaw which screw also has a jaw fitted on it, the above parts being used in con-nection with a detachable handle and socket as hereinafter described.

To enable those skilled in the art to fully 30 understand and construct my invention I will proceed to describe it.

A, represents a rectangular bar at one end of which there is a jaw B, permanently

attached. On this bar there is also placed a sliding jaw C, the latter being allowed to slide freely on the bar. The two jaws B, 35 C, are precisely similar and at one end they are provided with lips a.

Through the stationary jaw B, there 40 passes loosely a screw D, said screw being provided with a shoulder b, which bears against the outer side of the jaw B. The

screw D, also passes through the jaw C, the latter being provided with an internal screw thread in which the screw works. The outer 45 end of the screw D, is provided with an eye c, in which a handle E, is fitted, that is to say when the implement is used as a vise. This handle has a nut d, at one end by removing which the handle may be readily de- 50 tached when not required for use.

F, is a socket which is simply a rectangular metal tube e, secured to a plate f, the latter being secured horizontally by screws to a bench or any suitable support.

When the implement is used as a wrench, the bar A, is fitted in the guide F, and secured therein at any desired point by a set screw g, as shown in Fig. 1. By turning the handle E, the jaw C, may be moved on the 60 bar A, and articles secured between the two jaws the wide ends of which are uppermost.

When the implement is used as a vise the handle is removed and the bar withdrawn from the socket F. The bar A, serves as a 65 handle and the screw D, is turned direct by

hand to adjust the jaw C, to the nut. By referring to Fig. 2, it will be seen that a very simple wrench is obtained. The lips a, a, of the jaws are used when the imple- 70 ment is employed as a wrench.

Having thus described my invention what claim as new and desire to secure by Letters Patent is-

The combination of the bar A, jaws B, C, 75 screw D, provided with a detachable handle E, and the socket F, arranged as shown to form a new and useful article of manufacture for the purpose specified.

## WILLIAM RUSSELL.

Witnesses:

ENOS TALBOT, MARY B. TALBOT.