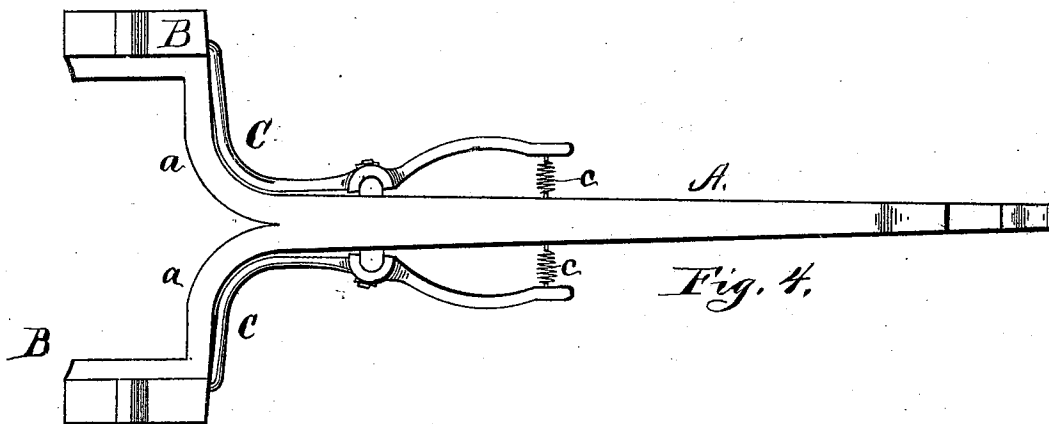
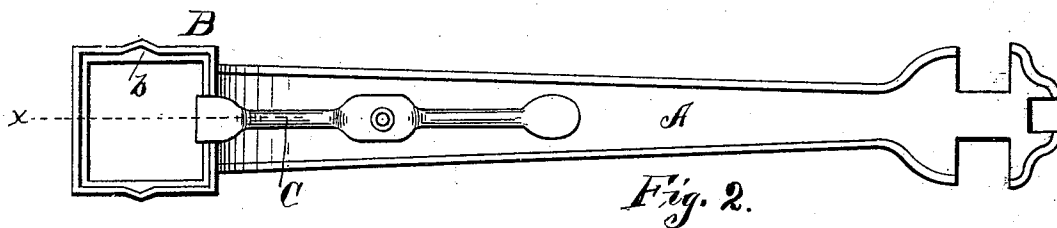
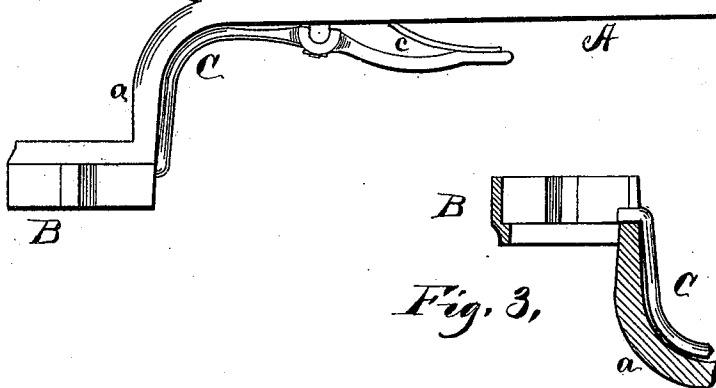
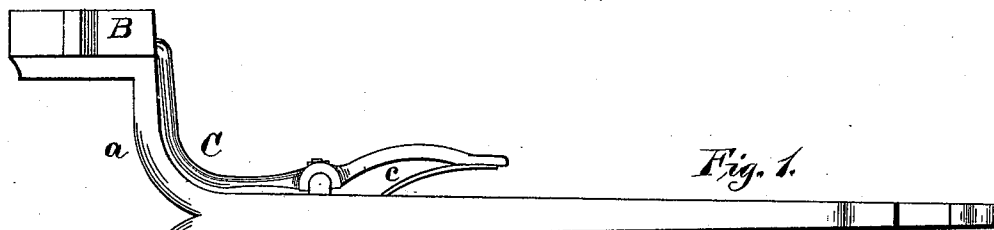


(No Model.)

W. L. PIKE.
WRENCH.

No. 510,441.

Patented Dec. 12, 1893.



WITNESSES:

H. A. Carhart.
J. May Goodrich.

INVENTOR

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ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM L. PIKE, OF GROTON, NEW YORK.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 510,441, dated December 12, 1893.

Application filed May 15, 1893. Serial No. 474,227. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. PIKE, of Groton, in the county of Tompkins, in the State of New York, have invented new and useful
5 Improvements in Wrenches, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to improvements in
10 vehicle wrenches.

My object is to produce a vehicle wrench which is adapted to fit nuts of various sizes, and the further object of providing means for securing the nut within the wrench after it
15 has been taken off, so that it may be laid down and again taken up; and to that end my invention consists in the several new and novel combinations of parts hereinafter described and which are specifically set forth in the claim hereunto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1, is an edge view of the wrench, complete. Fig. 2, is a side or top plan view
25 thereof. Fig. 3, is a section on line *x x*, Fig. 2. Fig. 4, is an edge view, showing a modified form of spring.

A, is the handle constructed in any form desired and having one or more arms—*a*—
30 at its end, as shown, these arms being provided with sockets—B—, the inner face of the socket being stepped; that is, constructed so as to fit rectangular nuts of different sizes, their centers in alignment; said stepped or
35 socket portions being adjacent to each other, as shown in the drawings. These secondary sockets may be provided with triangular depressions—*b*— so that a nut of any other
40 size may be placed therein, or a hexagonal or octagonal nut may be placed therein and operated.

To the handle are pivoted, substantially centrally, the somewhat L-shaped levers—C— having one end extending up into the pathway of the inner face of the nut sockets, and
45 a spring—*c*— interposed between its opposite end and the face of the handle, for the purpose of creating a tension to force upwardly that end of the handle and produce a tension upon the opposite end of the lever with the
50 nut, thereby gripping it securely and holding it until the nut is ready to be replaced.

I do not confine myself to any particular form of spring as it will be evident that a flat strap spring, coil spring or other means may
55 be devised for producing this tension.

What I claim as my invention, and desire to secure by Letters Patent, is—

A wrench comprising, a shank *a*, having one extremity thereof flattened and cut away
60 to form recesses of varying size, the opposite extremity thereof being branched and each of said branches terminating in heads B, B, said heads being internally chambered and stepped or provided with two or more angular
65 openings arranged one above the other and varying in size, and the oppositely arranged spring-pressure fingers pivotally secured on the shank with one extremity thereof forming a handle and the opposite extremity projecting through an opening of said
70 head B, and centrally of and between the said differential openings so as to engage and retain a nut in either opening, as and for the purpose described. 75

In witness whereof I have hereunto set my hand this 8th day of May, 1893.

WILLIAM L. PIKE.

In presence of—

HOWARD P. DENISON,
C. B. KINNE.