

(No Model.)

J. A. RIORDAN.
COMBINATION TOOL FOR CARRIAGES.

No. 519,550.

Patented May 8, 1894.

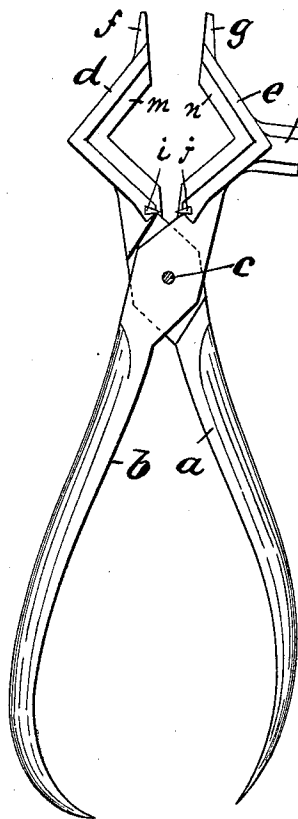


Fig. 2.

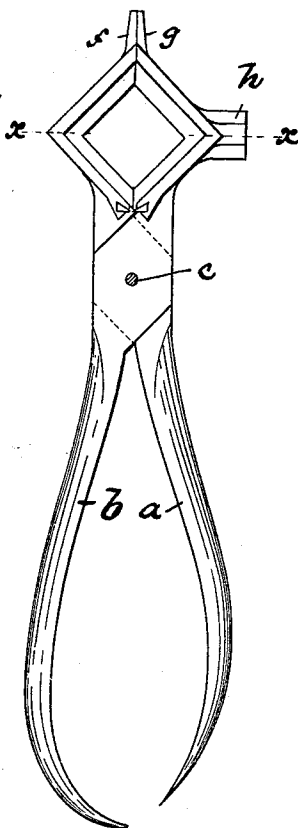


Fig. 1.

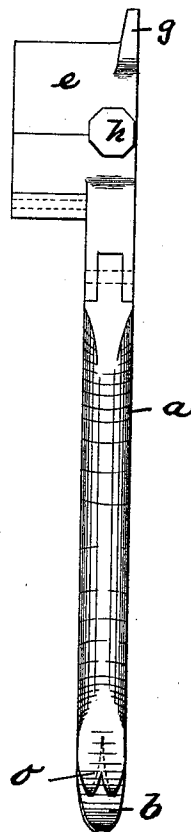


Fig. 3.

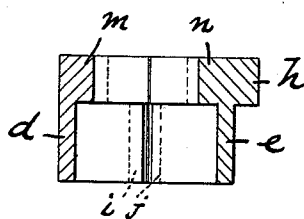


Fig. 4.

WITNESSES:

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COMBINATION-TOOL FOR CARRIAGES.

SPECIFICATION forming part of Letters Patent No. 519,550, dated May 8, 1894.

Application filed March 10, 1894. Serial No. 503,099. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. RIORDAN, a citizen of the United States, residing in Harrison, county of Hudson, and State of New Jersey, have invented certain new and useful Improvements in Combination-Tools for Carriages; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a combination tool, of simple, strong and durable construction especially adapted for use on carriages.

It consists in the improved combination tool, and in the combination and arrangements of parts, substantially as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings in which like letters of reference indicate corresponding parts in each of the several figures: Figures 1 and 2 are plan views of my improved combination tool, closed and partly opened respectively. Fig. 3 is a side view of Fig. 1, and Fig. 4 a sectional view on the line $x-x$ of Fig. 1.

In said drawings, a and b represent the arms or handles pivotally secured to each other as at c and provided toward their forward ends with triangular shaped jaws d and e respectively, forming when closed, a nut-wrench of a size to fit the nuts on the ends of the axles of a carriage or wagon. These jaws are so arranged that they project on one side and beyond the plane of the handle as clearly shown in Fig. 3. Integral with one of the jaws (in the drawings with jaw e) and in a line with the handles is a projection h in the form of a hammer head. The jaws e and d are also provided at their inner sides with projecting portions n and m respectively, adapted to form a nut-wrench of smaller diameter. These projections n and m are of such a width that they will not interfere with the wrench formed by the jaws e and d . The forward portions of said jaws e and d are also provided with projections g and f respectively, adapted to form nippers or pliers. The rear portions of said jaws are provided with grooves in which are placed removable cutters or blades i and j . One of the handles

(b) is curved and pointed at its outer end so as to form a hoof-hook, while the other is flattened and recessed as at o and may thus be used as a tack or nail puller.

The advantage of the above described combination tool rests in the simplicity, durability and cheapness, and further in its having the projections m and n whereby a wrench of smaller diameter is formed, which is suitable for engaging nuts of smaller size, such as those on the fifth wheel or on other portions of the wagon. As the jaws are provided with removable or interchangeable cutters or blades i and j , round wire and flat strips can easily be cut, and should said cutters wear out they can easily be replaced by others.

I do not intend to limit myself to the precise construction shown and described, as various changes can be made without changing the scope of my invention.

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

1. A combination tool formed of two arms pivoted together and provided at their forward ends with triangular jaws having inwardly extending projections, said jaws and their respective projections forming wrenches of two different sizes, a hammer head arranged on one of said jaws, cutting blades removably arranged in the lower portions of the jaws, and projections on the outer portions of said jaws adapted to form nippers or pliers, all said parts, substantially as described.

2. A combination tool formed of two arms pivoted together and provided at their forward ends with triangular jaws having inwardly extending projections, said jaws and their respective projections forming wrenches of two different sizes, a hammer head on one of said jaws, removable cutting blades arranged in the lower portions of the jaws, a hoof-hook formed at the rear end of one of the handles and a nail puller at the rear end of the other handle, all said parts, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of March, 1894.

JOSEPH A. RIORDAN.

Witnesses:

ALFRED GARTNER,
WM. D. BELL.