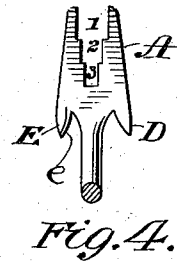
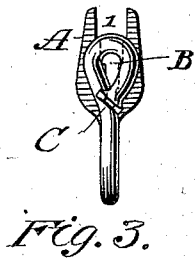
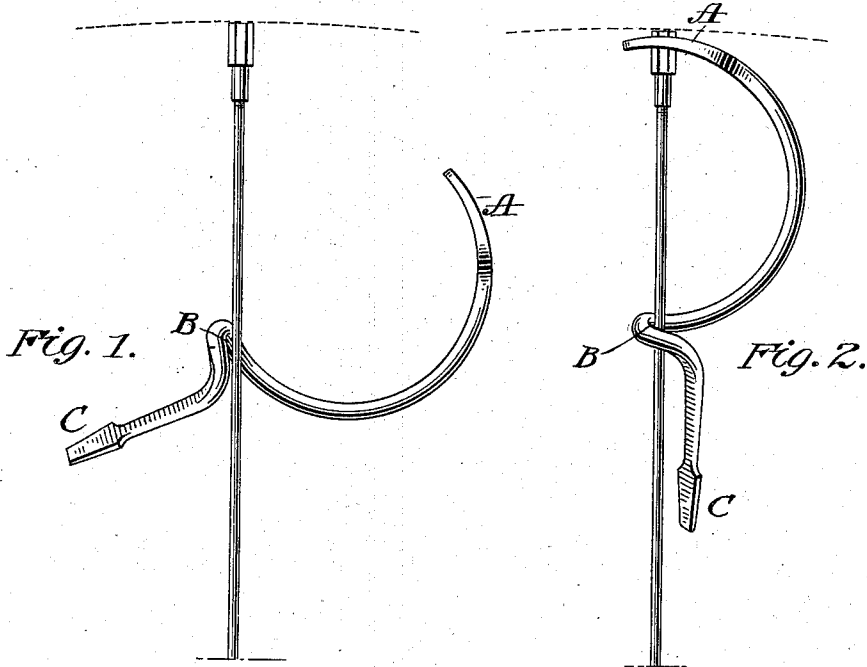


(No Model.)

W. H. HUMMEL & L. H. LOTHBRIDGE.
COMBINATION TOOL.

No. 562,611.

Patented June 23, 1896.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM H. HUMMEL AND LOUIS H. LOTHBRIDGE, OF PHILADELPHIA, PENNSYLVANIA; SAID HUMMEL ASSIGNOR TO SAID LOTHBRIDGE.

COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 562,611, dated June 23, 1896.

Application filed October 16, 1895. Serial No. 565,880. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM HENRY HUMMEL and LOUIS H. LOTHBRIDGE, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented an Improved Combination-Tool, of which the following is a specification.

Our device is designed particularly for the use of bicyclists and is to be used for tightening up the wheel-spokes, and may also be provided with a screw-driver, a blunt-pointed hook, and a hook having a cutting edge. The details of its formation or construction are hereinafter set forth.

In the accompanying drawings, Figures 1 and 2 are similar views illustrating the application of the tool to the spoke, and its nipple or nut, of a bicycle-wheel; Fig. 3, a plan view, looking at the edge, of the screw-driver; Fig. 4, a detail view of the wrench and of the tool, showing the blunt and knife-edge hooks.

The tool is provided with a rocker-shaped foot or jaw formed with nipple or nut sockets 1, 2, and 3 of different sizes. The shank extending from this foot is curved, preferably, substantially in the arc of a circle, and extends approximately through a half-circle, at the termination of which the shank is formed with a spirally-arranged seat, recess, or socket B, for the reception of the spoke. In Figs. 1, 2, and 3 this spiral socket is formed by bending the shank back upon itself, and then extending it approximately in line with, or parallel with, the diameter or chord of the curve extending from the foot A to the spoke-seat B and forming its end with a screw-driver head or edge C. The application of this tool to the spoke and nipple of a bicycle-wheel is

indicated in Figs. 1 and 2, the tool being first applied so as to bring the spoke within the seat or socket B, and then turned until the jaws of the foot embrace the nipple of the spoke. The tool may now be revolved around the spoke with facility, since it is guided and supported at the socket B by the spoke, and at the wrench-foot A by the nipple.

Such a tool may be cheaply constructed of suitable metal, is small, light, and convenient, and may be carried in the waistcoat-pocket.

As indicated in Fig. 4, we may extend from one side or edge of the foot A, and approximately parallel with it and the shank, a blunt-pointed hook D, and a similar hook E may be extended from the other side of the foot in like manner, and formed with a knife-edge. The blunt-pointed hook D and the knife-edge hook E will be useful for various purposes.

We claim as our invention—

1. A tool for the use of bicyclists, comprising a jaw formed with one or more nut-seats, a handle and a spirally-arranged spoke-socket.

2. A tool for the use of bicyclists, consisting of a rocker-shaped jaw provided with one or more spoke-sockets and the hooks, D and E, a curved body portion or handle, A', a loop, B, formed by bending the end of the body portion spirally, substantially as described.

In testimony whereof we have hereunto subscribed our names.

WILLIAM H. HUMMEL.
LOUIS H. LOTHBRIDGE.

Witnesses:

M. M. FOX,
PHILOMENA FOX.