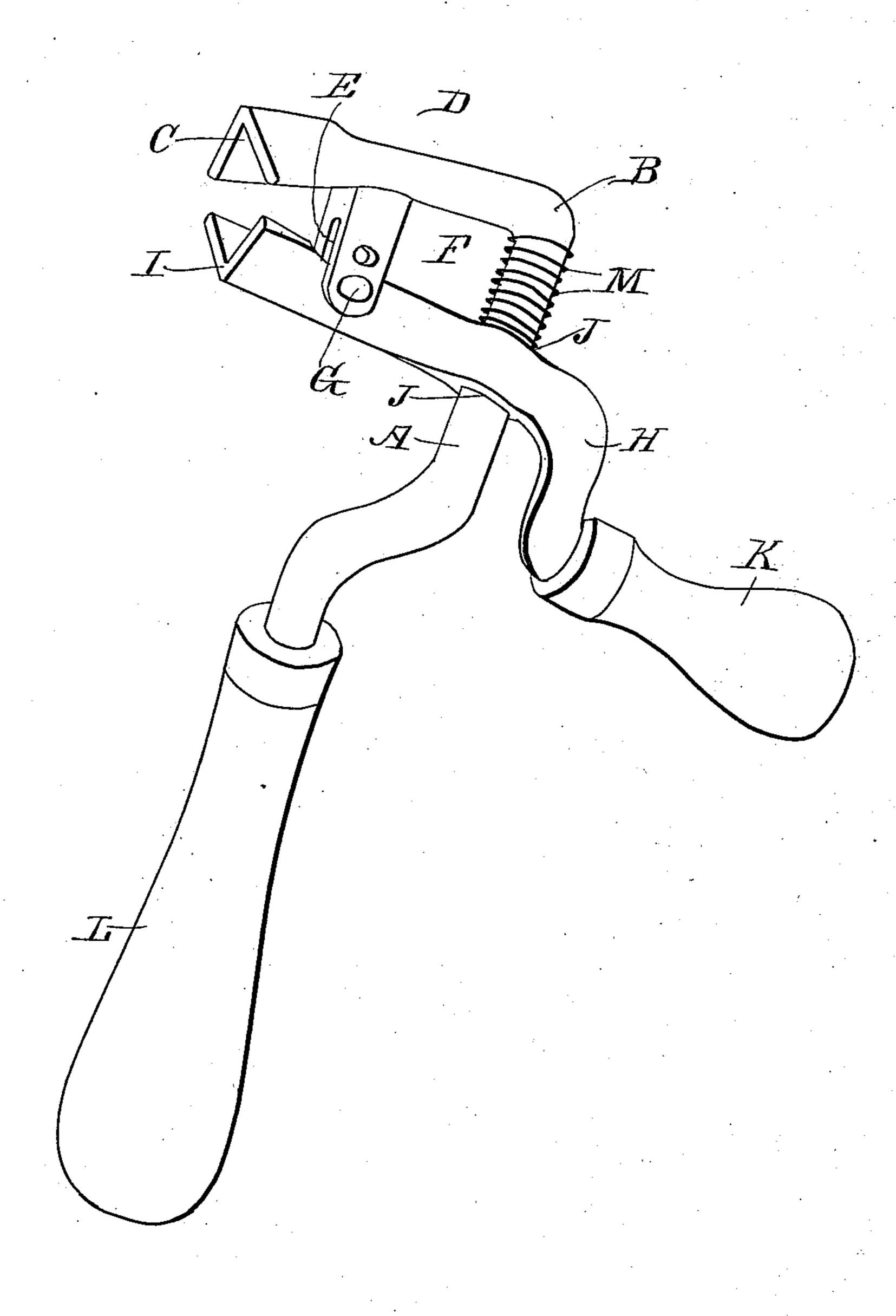
(No Model.)

H. W. HACKLEY.

WRENCH.

No. 377,827.

Patented Feb. 14, 1888.



Witnesses= 7. B. Pott. O. W. Nottingham. A. W. Mackey. Inventor= By Shamon, Mackey.

United States Patent Office.

HENRY W. HACKLEY, OF KOKOMO, INDIANA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 377,827, dated February 14, 1888.

Application filed January 29, 1887. Serial No. 225,930. (No model.)

To all whom it may concern:

Be it known that I, Henry W. Hackley, a citizen of the United States, residing at Ko-komo, in the county of Howard and State of Indiana, have invented a new and useful Wrench, of which the following is a description, reference being had to the accompanying drawing, which forms a part of this specification.

My invention relates to improvements in wrenches which are used mostly for removing carriage-wheels; and the objects of my invention are to construct a wrench that will be cheap, simple, and easily handled, and especially adapted for removing nuts on vehicle-spindles and similar places where the nuts are usually covered with oil and dirt and unfit to handle with the fingers. I attain these objects by the mechanism illustrated in the accompanying drawing.

The arm A is formed in a particular shape, being bent at B and one end being provided with a handle, L, and the other end flattened and formed in a V shape at C, all as shown. Between the elbow B and the end C the slotted stud D is secured, the said stud being provided with a slot, E, and holes F for securing the pivoted arm H. The said arm H is similar to the arm A, and it is pivoted in the slotted stud by a movable pivot, G, as shown. One end of the said arm H is provided with a han-

dle, K, and the other end flattened and bent in a V shape at I, and the said arm is provided with a hanin a V shape at I, and the said arm is provided with a hole in it at J, through which

the arm A passes, the said hole being made large enough to allow the arm H to work 35 freely. A spring, M, is coiled around the arm A between the elbow and the arm H, as shown, so that it will press the arm A downward and cause the V-shaped ends C and I to press together. The arm H is pivoted to the stud D 40 in the inside or outside holes, F, to suit the sized nut the wrench is to take hold of, and by spreading the handles apart the V-shaped jaws open and allow the nut to be clamped between them. When the jaws are clamped around a 45 nut, it can be rapidly turned on or off without being touched by the fingers, as the nut remains in the jaws until they are spread apart to release it.

Having thus described my invention, I claim 50 the following and desire to secure the same by Letters Patent:

In a wrench, the combination, with an arm, A, bent at B, said bent end being flattened and formed with a V-shaped jaw, and a slotted stud, D, secured to said bent portion, of an arm, H, provided with a hole, J, through which the arm A passes, said arm H being formed with a V-shaped jaw at one end and having its body portion pivoted between the 60 ends of the slotted stud D, and a spring, M, substantially as described.

HENRY W. HACKLEY.

Witnesses:

B. F. REDMOND, JOSIAH BREESON.