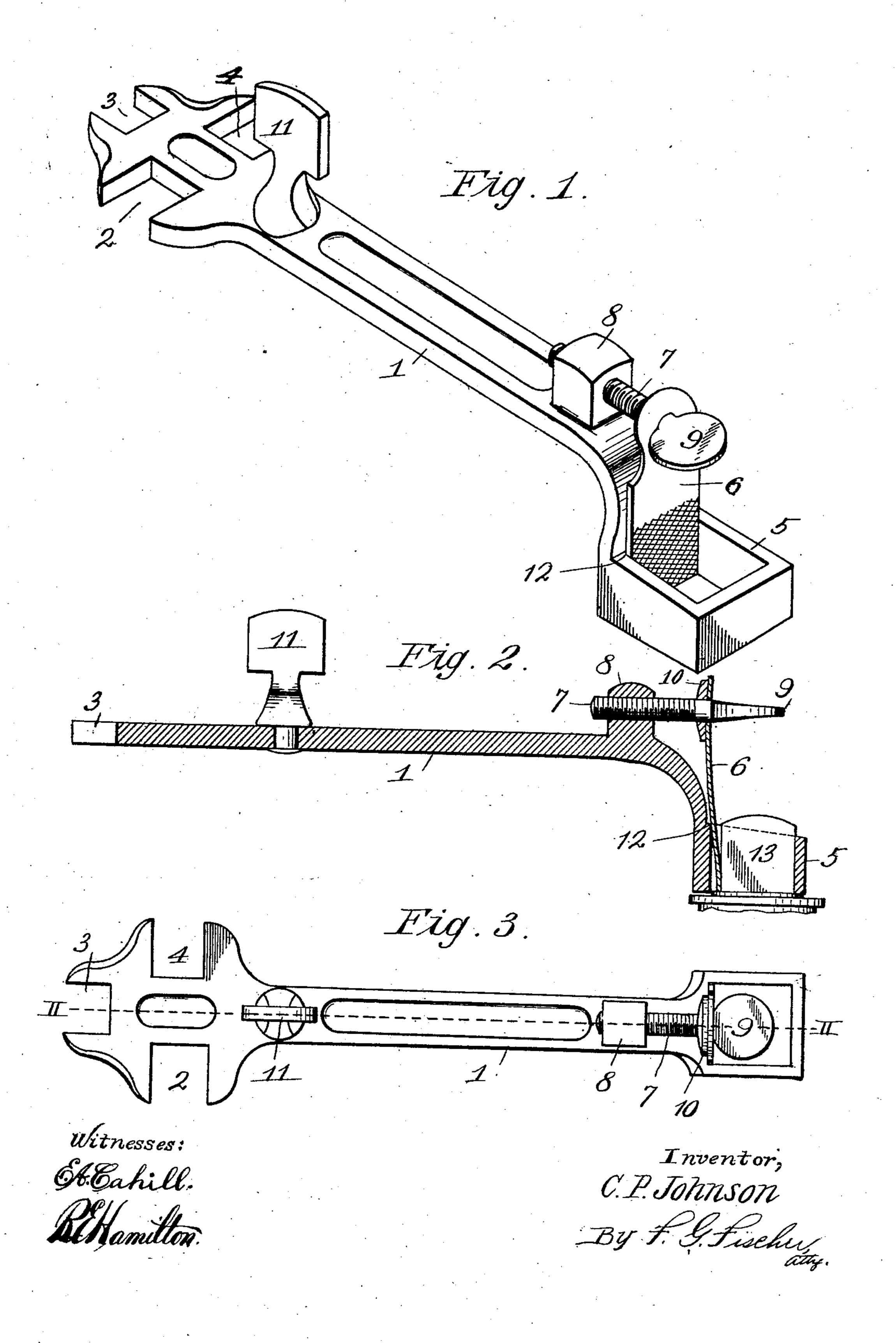
C. P. JOHNSON. WRENCH. APPLICATION FILED DEC. 2, 1907.



UNITED STATES PATENT OFFICE.

CHARLES P. JOHNSON, OF EUREKA, KANSAS.

WRENCH.

No. 883,887.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed December 2, 1907. Serial No. 404,817.

To all whom it may concern:

Be it known that I, Charles P. Johnson, a citizen of the United States, residing at Eureka, in the county of Greenwood and 5 State of Kansas, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to improvements in wrenches for applying nuts to and removing them from bolts, axles, &c.; and it consists more particularly of means for holding a nut from falling to the ground after it has been removed from a bolt or axle.

The invention is especially advantageous in removing nuts from axles as the operator need not get his fingers covered with axlegrease by handling the nuts and the latter need not become covered with dirt by falling to the ground, as they will be reliably held by the wrench.

Other features of the invention will hereinafter appear, and in order that it may be fully understood, reference will now be made to the accompanying drawing in which:—

Figure 1 represents a perspective view of my improved wrench. Fig. 2 is a central section thereof on line II—II of Fig. 3. Fig. 3 is a plan view of the invention.

In the drawing I have shown the inven-30 tion applied to a combination wrench consisting of a handle 1 provided at one end with recesses 2, 3, and 4 to receive different sized nuts, and at its opposite end with a socket 5 to receive a nut.

which is supported by a thumb-screw 7, and has its lower end extending down into the socket as shown in Figs. 1 and 2. Thumb-screw 7 extends through the upper portion of the clamp, in which it freely turns and adjustably engages a lug 8, cast integral with the handle 1. Thumb-screw 7 has a head 9 and a fixed collar 10 arranged on opposite sides of clamp 6, so that when the screw 45 is adjusted either inwardly or outwardly the upper portion of the clamp will be carried

therewith.

11 designates a knob swiveled to the rear portion of the handle to facilitate turning the wrench when applying a nut to or removing 50 it from the axle.

12 designates a shoulder integral with the rear upper portion of the socket wall, which forms a fulcrum for clamp 6 to rock upon when it is adjusted into or out of engagement 55 with the nut 13.

In practice when it is desired to remove the nut it is engaged by the socket 5 and then by the clamp 6, which is forced into frictional contact therewith by adjusting the thumb- 60 screw 7 inwardly and causing the clamp to rock on shoulder 12 until it grips the nut as shown in Fig. 2. Knob 11 is then grasped with the fingers and the wrench is rotated to remove the screw, after the completion of 65 which operation the nut is reliably held in the socket by the clamp so that it need not be handled with the fingers.

Having thus described my invention, what I claim is:—

1. The combination with a wrench provided with a socket to receive a nut, of a member extending into said socket, and a thumb-screw supporting said member and adjustably engaging the wrench for the purpose of 75 forcing the member into engagement with the nut.

2. The combination with a wrench provided with a socket to receive a nut, of a resilient member extending into said socket, 80 and a thumb-screw adjustably engaging the wrench and supporting the member, said thumb-screw being provided with a head arranged at one side of the member and a fixed collar at the opposite side of said member, 85 for the purpose described.

In testimony whereof I affix my signature, in the presence of two witnesses.

CHARLES P. JOHNSON.

Witnesses:
F. G. FISCHER,
M. Cox.