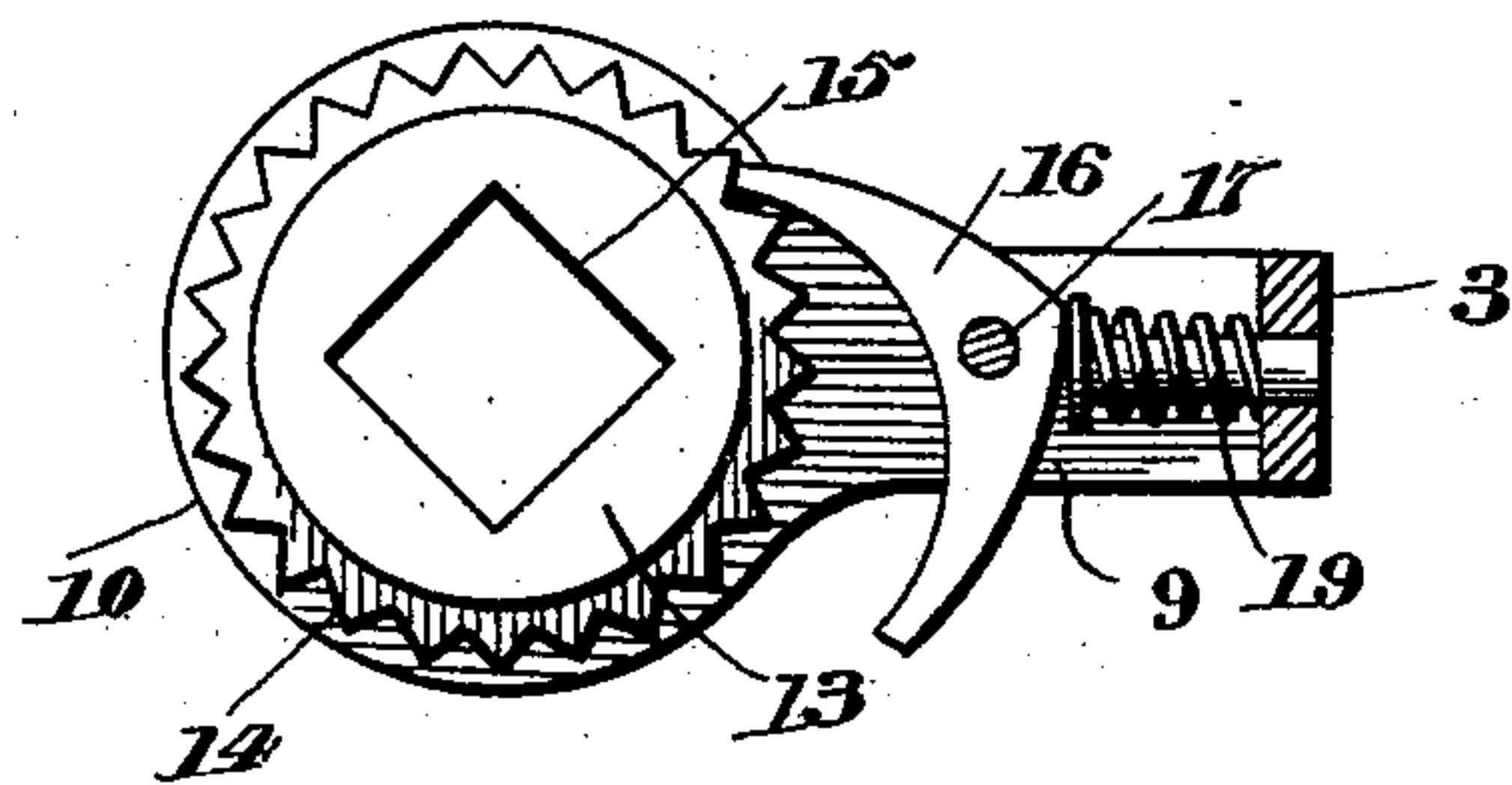
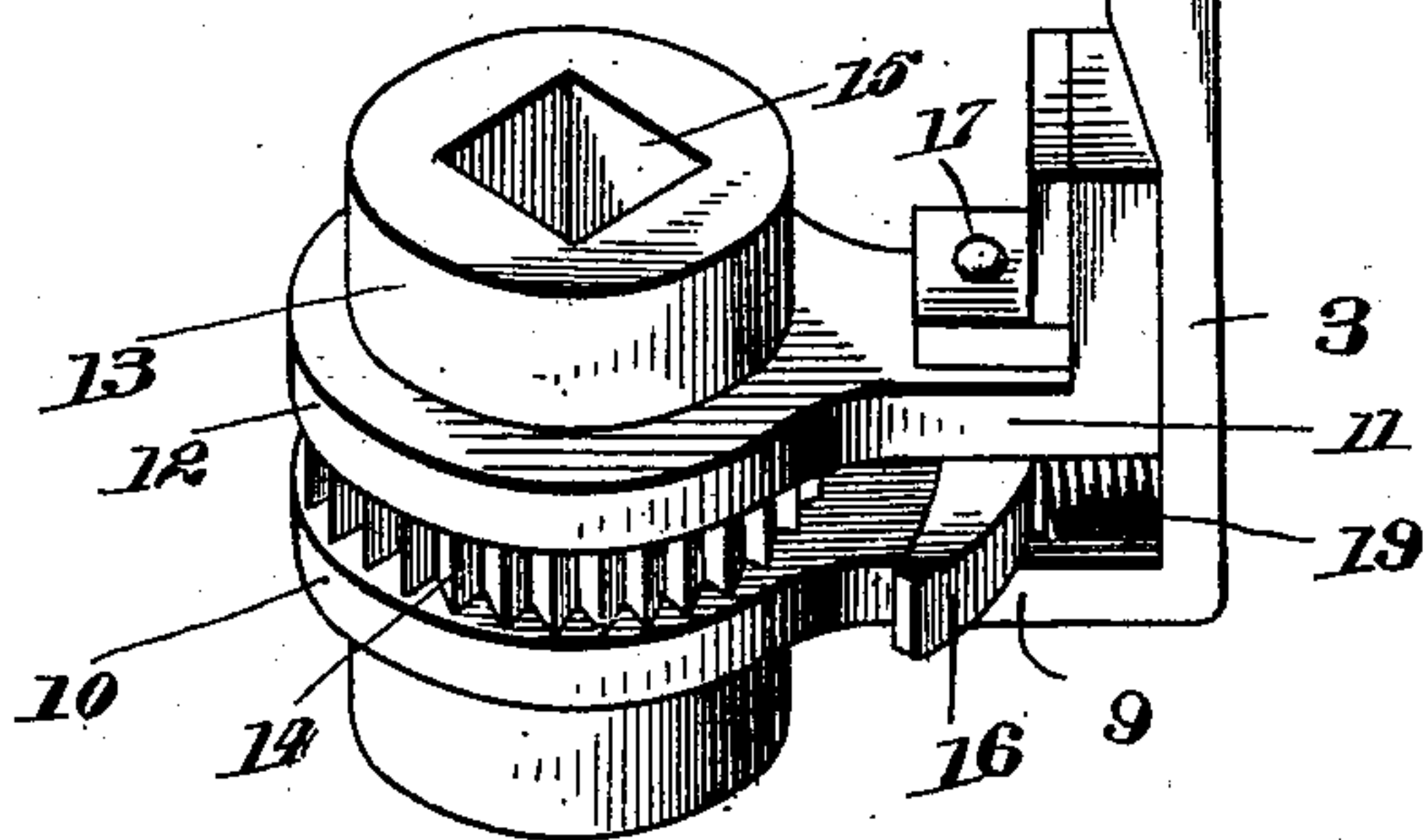
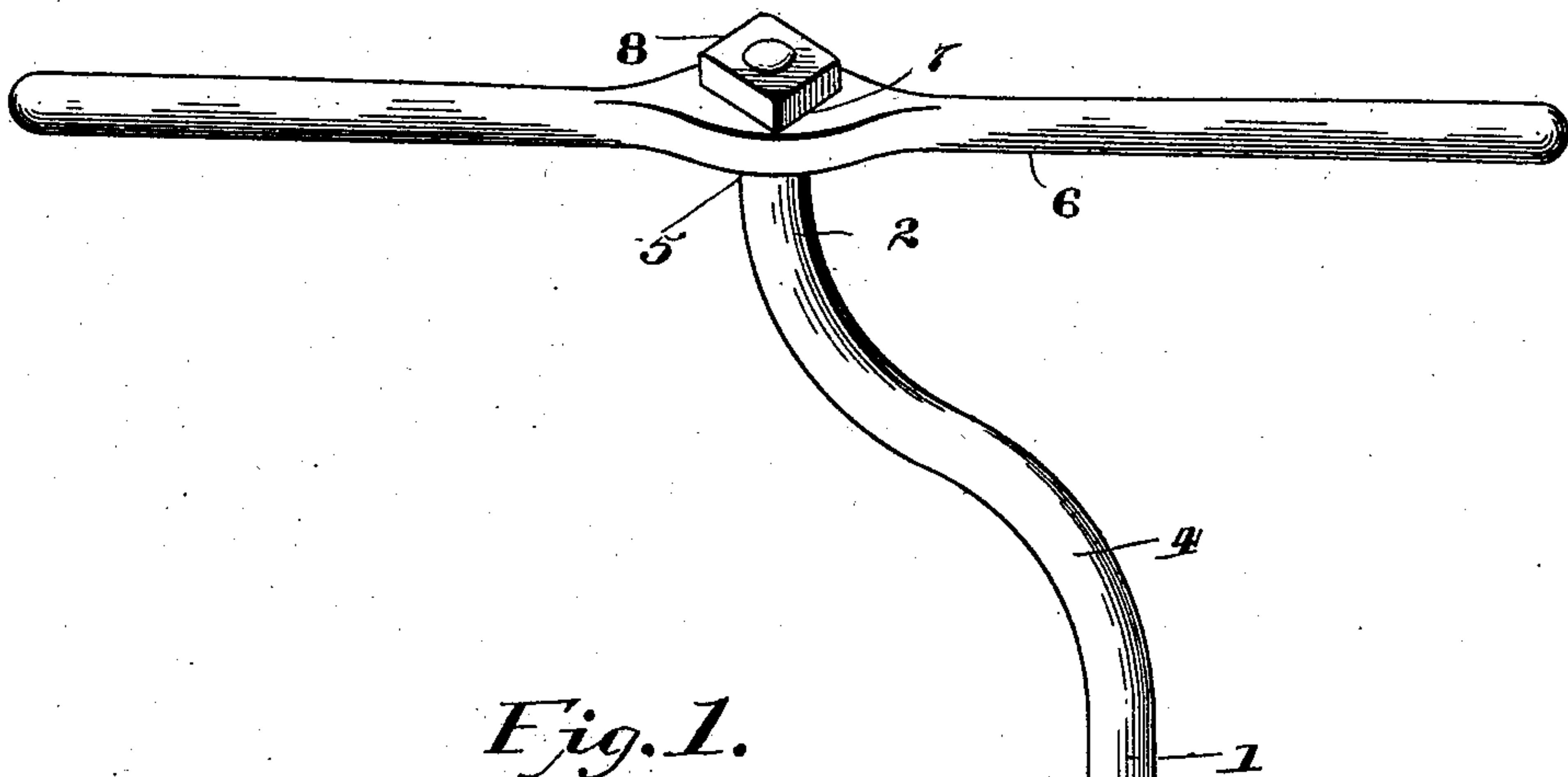


(No Model.)

J. P. JOHNSON.
WRENCH.

No. 601,146.

Patented Mar. 22, 1898.



Witnesses

L. H. Walker

Victor J. Evans

John Petter Johnson.
by John Wedderburn.

Attorney

UNITED STATES PATENT OFFICE.

JOHN PETTER JOHNSON, OF WESTBROOK, MINNESOTA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 601,146, dated March 22, 1898.

Application filed September 4, 1897. Serial No. 650,602. (No model.)

To all whom it may concern:

Be it known that I, JOHN PETTER JOHNSON, a citizen of the United States, residing at Westbrook, in the county of Cottonwood and State of Minnesota, have invented certain new and useful Improvements in Wrenches; 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.

This invention relates to wrenches, and has for its object to provide an effective wrench for tightening the cylinder-teeth on threshing-machines.

The detailed objects and advantages of the invention will appear in the course of the subjoined description.

The invention consists in an improved wrench embodying certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claim hereto appended.

In the accompanying drawings, Figure 1 is a perspective view of a wrench constructed in accordance with the present invention. Fig. 2 is a detail section through the lower end of the wrench.

Similar numerals of reference designate corresponding parts in both views.

The improved wrench contemplated in this invention comprises an irregularly-shaped stock 1, the same embodying lower and upper end portions 2 and 3, which extend in substantially parallel planes and which are connected by an offset 4, formed on a compound curve, whereby the upper end portion 2 is arranged in alinement with and above the tooth to be operated upon, and this upper portion at 5 receives a cross-head or handle 6, provided at its central portion with an opening to receive the stock 1, the handle being held thereon by means of a nut 8 or in any convenient manner.

The lower end of the stock 1 is bent at a right angle to form a bracket or ear 9, comprising a ring or collar 10. Secured to the stock 1, at a slight distance from said ring or collar, is a second angular bracket 11, having at its outer end a ring or collar 12, arranged immediately above and in alinement with the ring 10. Journaled in said rings is a sleeve or chuck 13, having a circumferential series

of teeth 14, which work between the two rings 10 and 12, thus preventing the accidental escape of the sleeve or chuck. This chuck is provided with a squared bore 15, adapted to fit the nuts on the teeth of the cylinder, whereby when the chuck or sleeve is turned the nuts will be turned in a corresponding direction.

Arranged between the brackets or ears is a two-edged dog 16, fulcrumed at an intermediate point on a bolt or pin 17 and backed up by an actuating-spring 19, which is arranged in such a manner as to hold one end or the other of the dog in engagement with the teeth on the chuck or sleeve. The dog is made reversible, so that the wrench can be turned in either direction for tightening or loosening the teeth of the cylinder.

By means of the wrench above described access may be readily obtained to the nuts on the shanks of the cylinder-teeth without dismantling the machine. The wrench is exceedingly simple in construction and comprises no delicate parts liable to get out of order.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

A wrench for adjusting nuts on cylinder-teeth, comprising a stock having its end portions arranged in different but substantially parallel planes and offset intermediate its ends, a cross-head or handle fitted to one end thereof, parallel ears or brackets extending from the opposite end of said stock and at right angles thereto and provided at their outer ends with rings or collars set a slight distance apart, a chuck journaled in said collars and rotatable on an axis parallel to the stock and also embodying a circumferential series of teeth lying between the collars, and a reversible two-edged spring-pressed dog fulcrumed on an axis parallel to the stock and engaging said teeth, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN PETTER JOHNSON.

Witnesses:

W. A. SMITH,
ANTON BERG.