

E. R. GILBERT.
 WRENCH.
 APPLICATION FILED AUG. 1, 1910.

976,064.

Patented Nov. 15, 1910.

Fig. 1

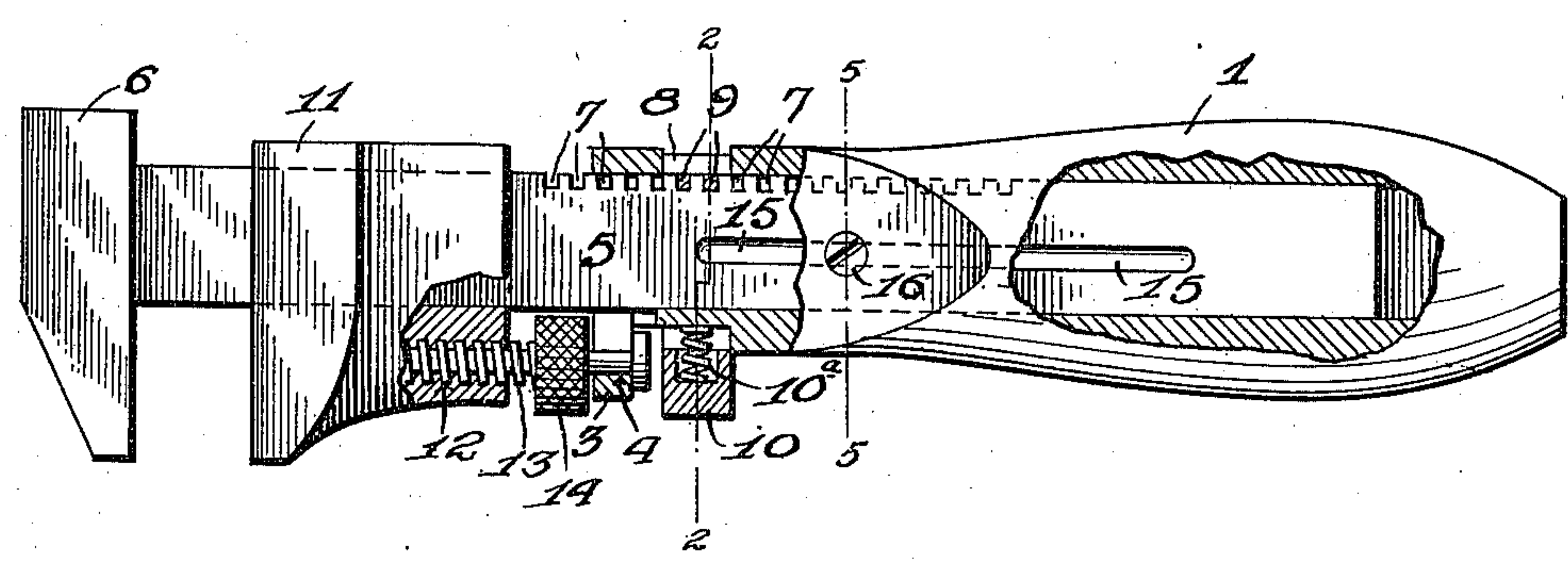


Fig. 2.

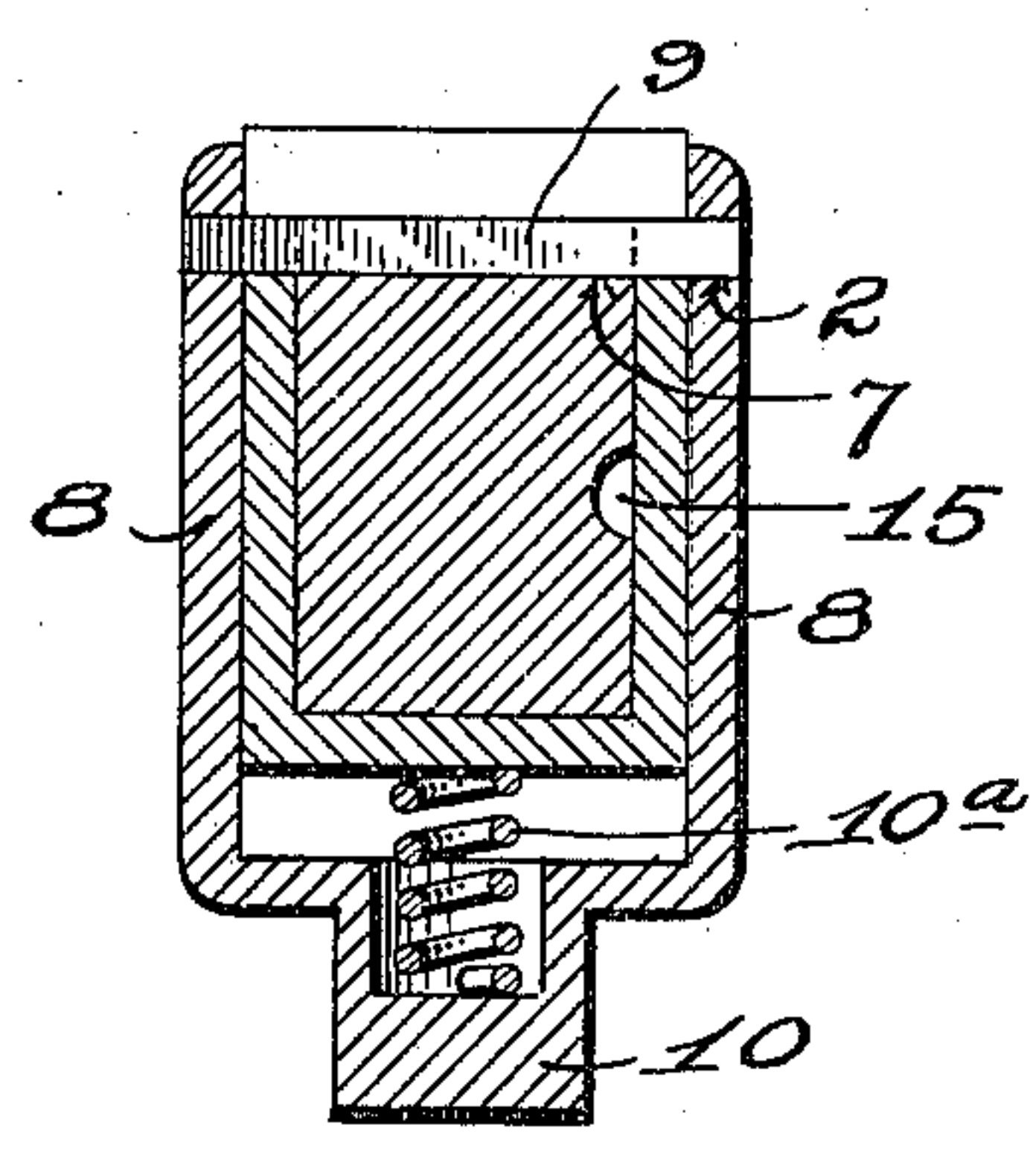


Fig. 3.

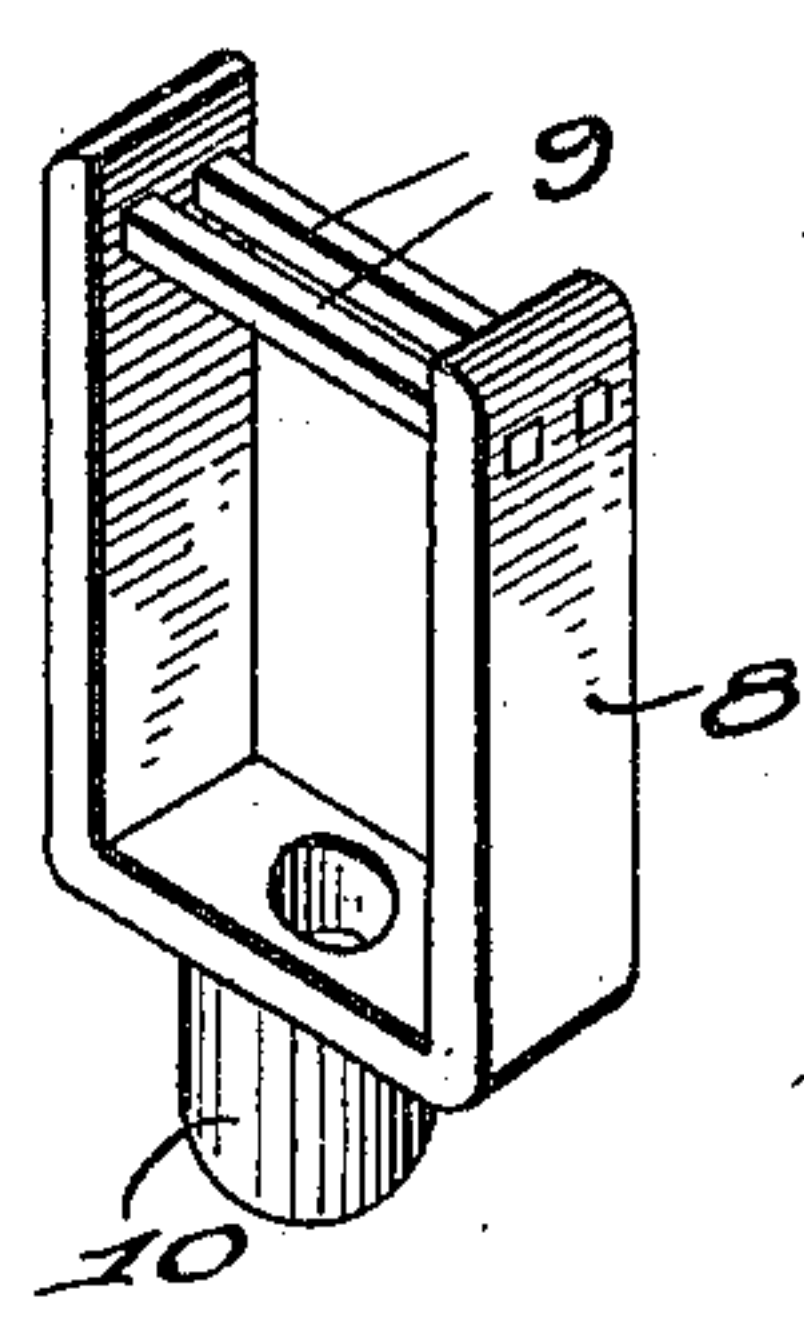


Fig. 4.

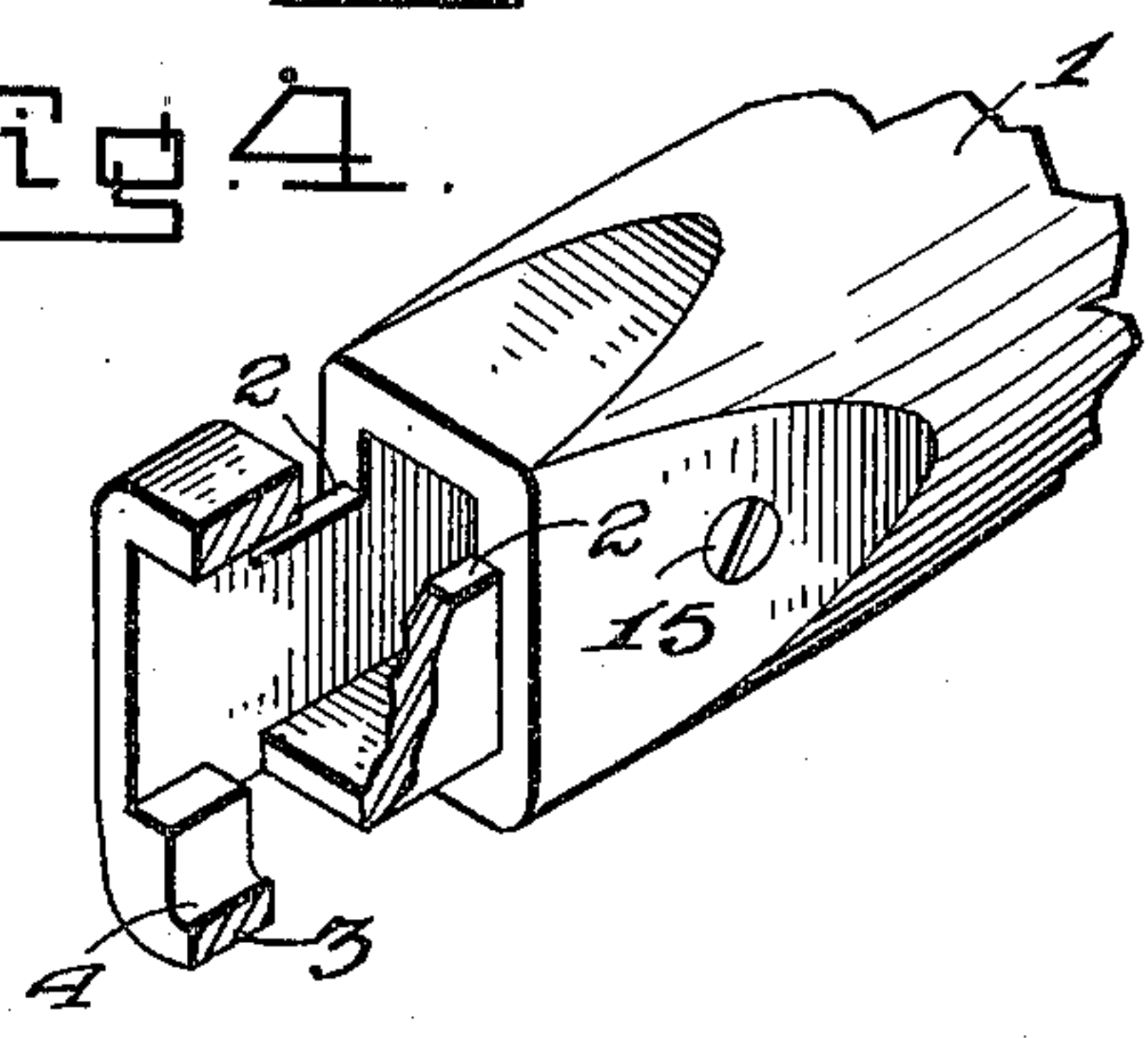
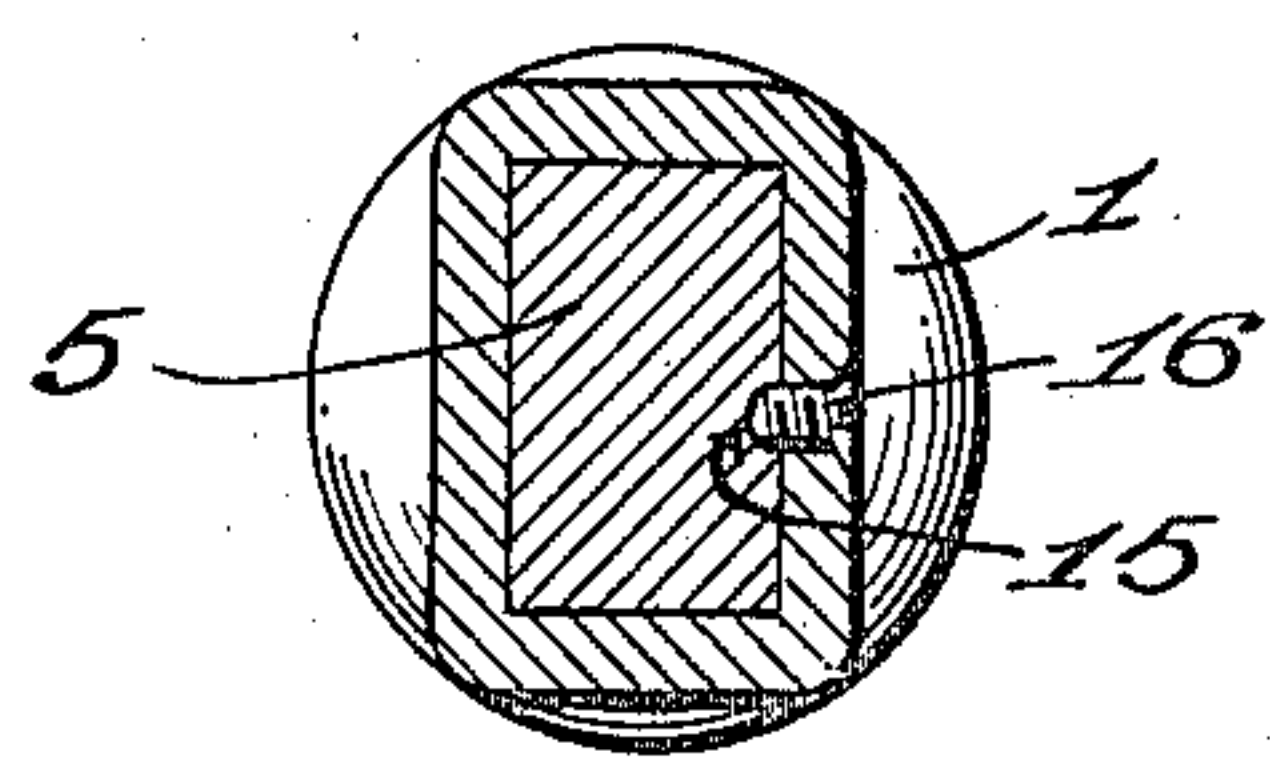


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

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WRENCH.

976,064.

Specification of Letters Patent. Patented Nov. 15, 1910.

Application filed August 1, 1910. Serial No. 574,781.

To all whom it may concern:

Be it known that I, EDWARD R. GILBERT, a citizen of the United States, residing at Kittanning, in the county of Armstrong and State of Pennsylvania, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to wrenches and the principal object of the same is to provide simple and novel jaw adjusting and jaw locking means which permit the jaw to be readily adjusted to the article to be turned and then rigidly locked in the adjusted position.

In carrying out the objects of the invention generally stated above it will be understood, of course, that the essential features thereof are necessarily susceptible of changes in details and structural arrangements, one preferred and practical embodiment of which is shown in the accompanying drawings, wherein:—

Figure 1 is a view in side elevation, partly in section of the improved wrench. Fig. 2 is a transverse vertical sectional view taken on the line 2—2, Fig. 1. Fig. 3 is a detail perspective view of a locking frame forming a part of this invention. Fig. 4 is a fragmentary perspective view of the inner end of the handle. Fig. 5 is a transverse vertical sectional view taken on the line 5—5, Fig. 1.

Referring to the accompanying drawings by numerals, it will be observed that the improved wrench comprises a hollow handle 1 the inner end portion of which is cut-away to provide a transverse seat 2 and adjacent said seat the inner end of the handle is provided with a laterally projecting extension 3 having an opening 4 formed through it. A shank 5 of an outer jaw 6 is slidable in said hollow handle 1, said shank being provided with regularly spaced notches 7 on the rear longitudinal edge.

A locking frame 8 surrounds and is slidable through seat 2, said frame being provided with rear bars 9 for engaging the notches of shank 5 to lock said shank to the handle 1. A tubular extension 10 projects laterally from the front edge of frame 8 and has a spring seated therein which bears upon the front edge of the handle 1 and normally holds the frame 8 in position to cause bars 9 to engage the notches of shank 5.

An inner jaw 11 is slidable on shank 5 and has its forward portion provided with a threaded longitudinal opening 12 that is engaged by one end of the adjusting screw 13. Said screw carries the milled adjusting nut 14 and extends through extension 3 of handle 1 and is equipped with a head which limits its longitudinal movement in one direction.

Shank 5 is provided with a longitudinal groove 15 in one side that is engaged by a screw 16 projecting through handle 1 to limit the sliding movements of said shank.

With this invention it will be readily seen that the shank 5 can be adjusted by releasing the locking frame 8, and also that the inner jaw can be adjusted by means of the screw 13.

The two jaws are made adjustable so that the wrench can be as readily used for turning worn nuts as with new nuts. When used with new nuts, it will be obvious that the outer jaw can be readily adjusted to engage the same, but when used with worn nuts, a tight grip is necessary which require a fine adjustment, and such adjustment can be best obtained by means of the inner jaw and the screw 13.

What I claim as my invention is:—

1. A wrench comprising a hollow handle, a shank slidable therein, said shank provided with a jaw and with a transversely notched rear edge, a locking frame surrounding and transversely slidable on said handle and provided with bars for engaging said notches, means for holding said frame in position to engage said bars and notches, an inner jaw slidable on said shank, and means for adjusting said inner jaw.

2. A wrench comprising a hollow handle provided with a transverse seat, a shank slidable in said handle and provided with rear notches and a jaw, a frame slidably engaging said seat and provided with bars for engaging said notches, a tubular extension carried by said frame, a spring in said extension and bearing against said handle to hold said bars engaged with said notches, an inner jaw carried by said shank, and means for adjusting said inner jaw.

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

EDWARD R. GILBERT.

Witnesses:

U. G. HOBAUGH,
R. E. KENNERDELL.