

No. 850,756.

PATENTED APR. 16, 1907.

J. R. HUNT.
WRENCH.

APPLICATION FILED AUG. 18, 1906.

Fig. 1.

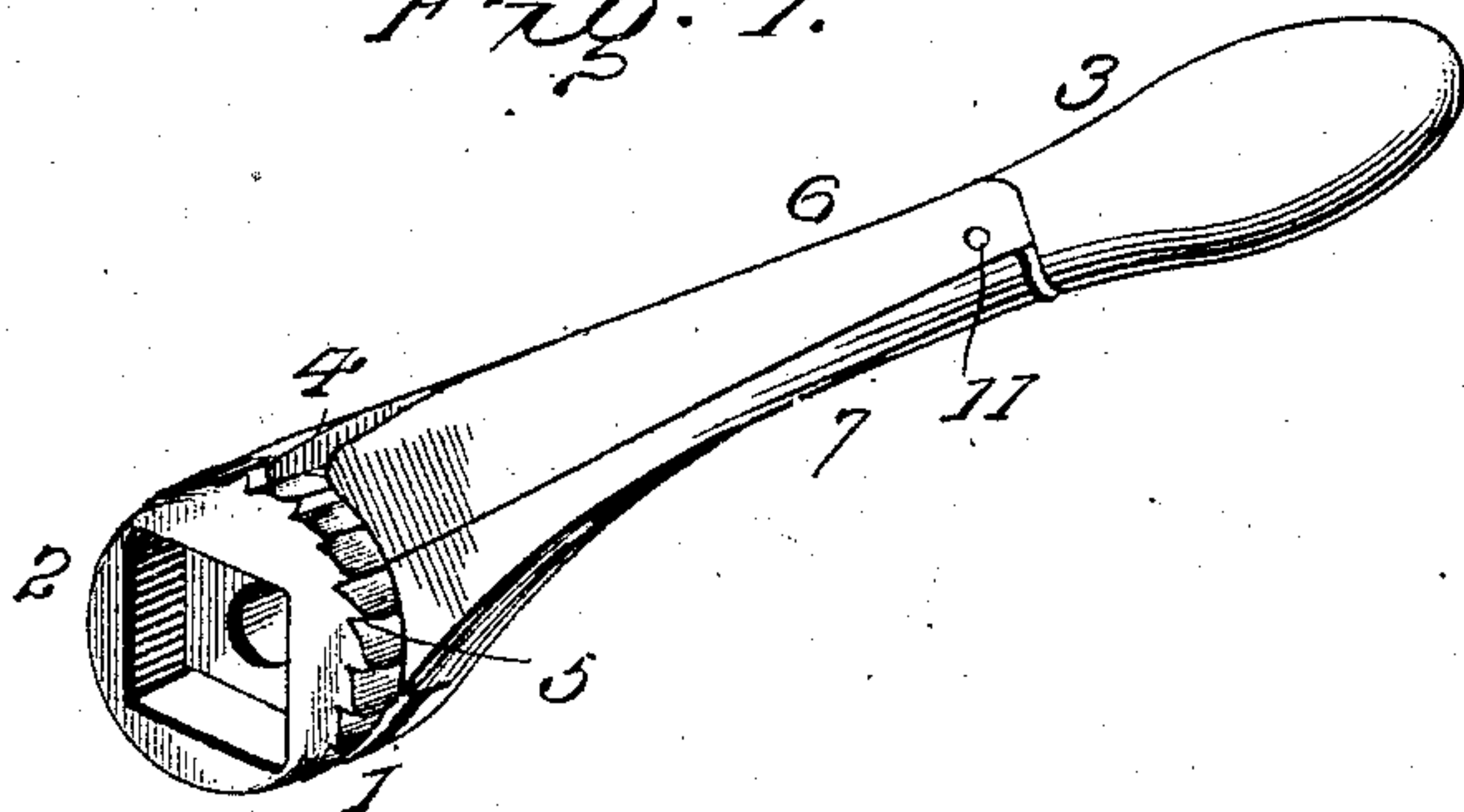


Fig. 2.

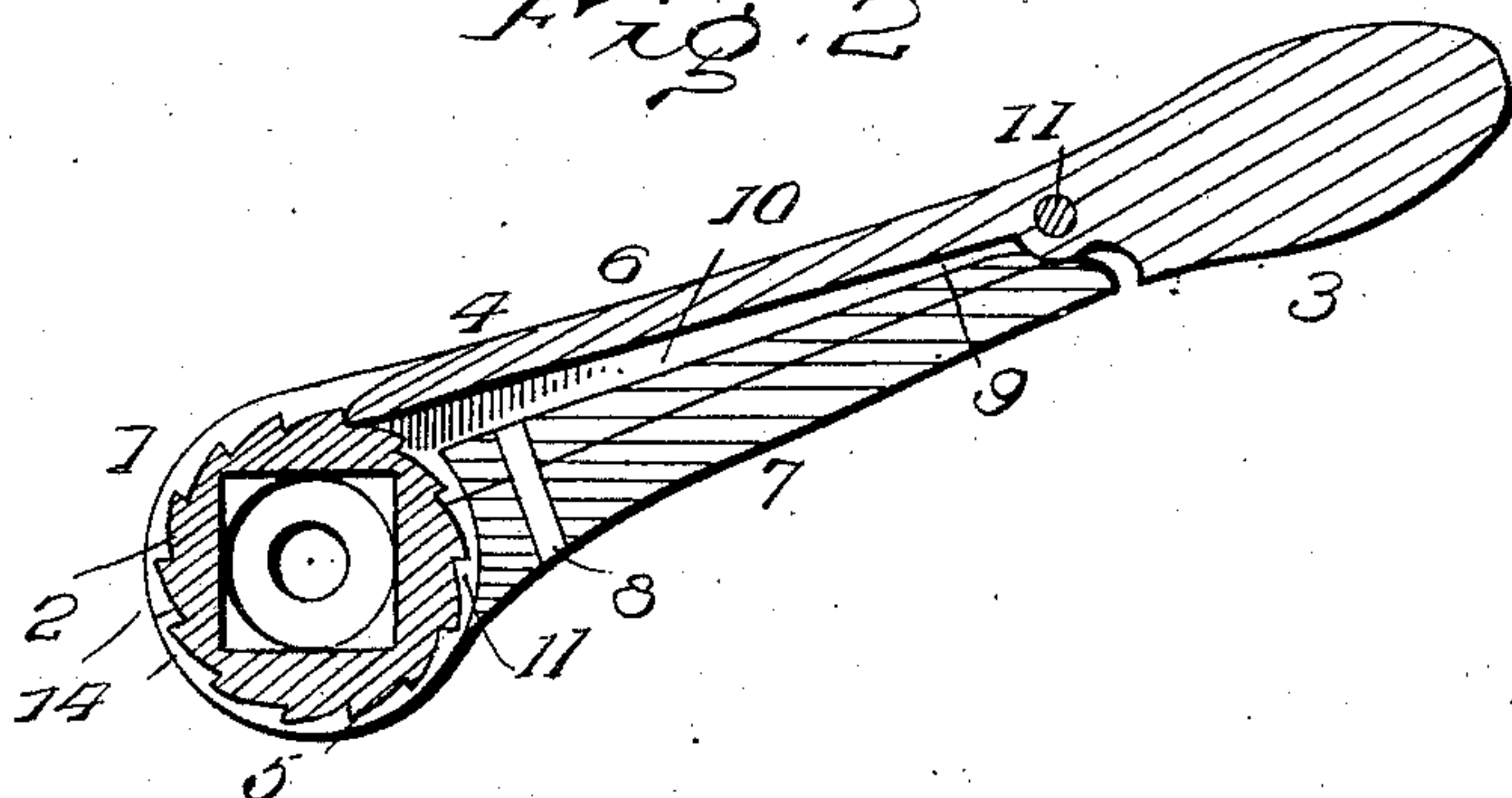


Fig. 3.

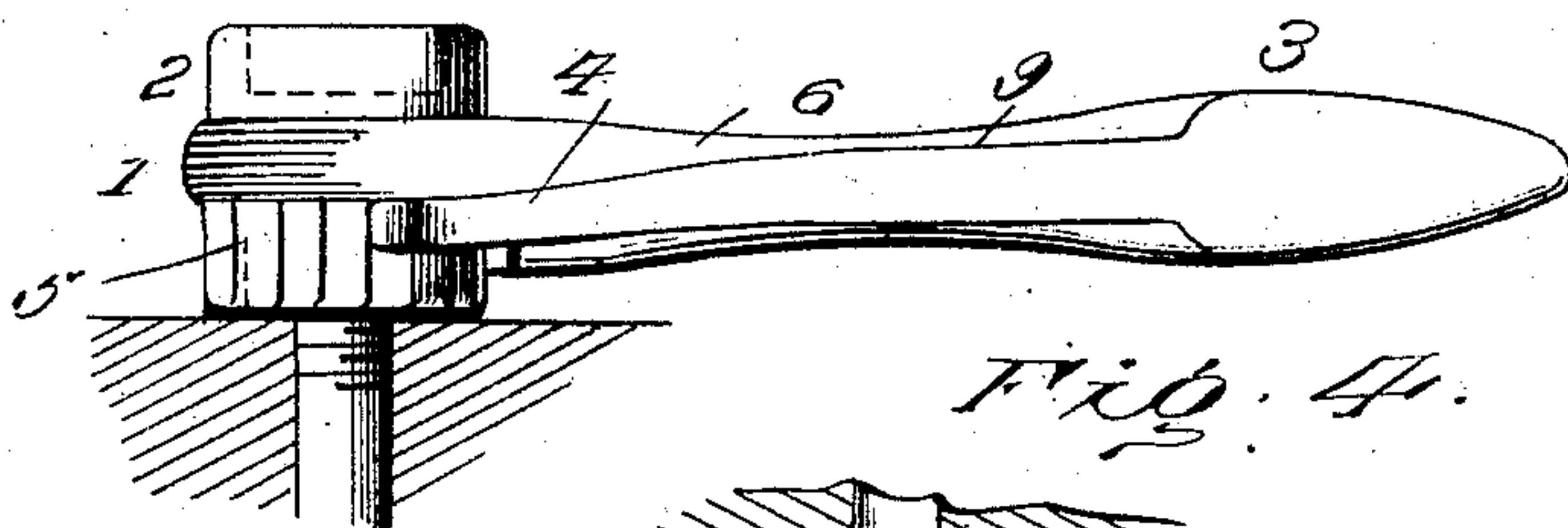
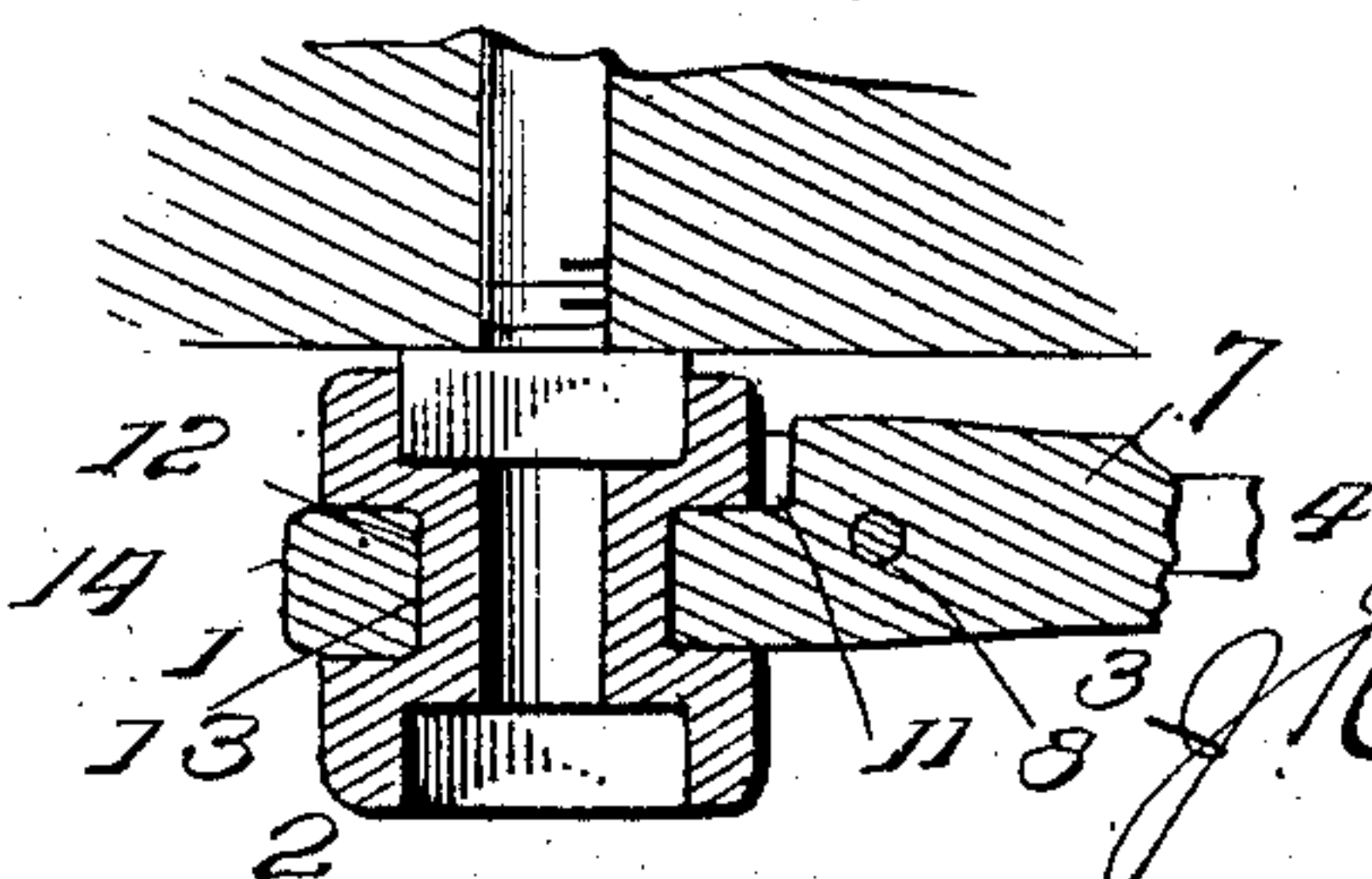


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN R. HUNT, OF FLOYD, CALIFORNIA.

WRENCH.

No. 850,756.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN R. HUNT, a citizen of the United States, residing at Floyd, in the county of Glenn and State of California, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in ratchet-wrenches, and consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

The object of the invention is to provide a wrench of this character composed of a few simple parts which may be made and assembled at a comparatively small cost to produce a strong, durable, and efficient tool.

Further objects and advantages of the invention, as well as the structural features by means of which they are attained, will be made clear by an examination of the specification, taken in connection with the accompanying drawings, in which the same reference-numerals indicate corresponding portions throughout, and in which—

Figure 1 is a perspective view of the improved ratchet-wrench. Fig. 2 is a longitudinal section through the same. Fig. 3 is a top plan view of the wrench, showing it applied to a nut, bolt, or the like; and Fig. 4 is a detail longitudinal sectional view through one end of the wrench, the plane of the section being at right angles to that of Fig. 2.

The improved wrench comprises a body or shank 1, a rotary head 2, mounted in one end of the shank and provided with sockets to engage nuts or bolt-heads, and a handle 3, pivoted in the opposite end of the shank and carrying a pawl 4, which engages an annular series of ratchet-teeth 5, formed upon the head 2. The shank tapers from its outer to its inner end and is composed of upper and lower sections 6 7, united by a rivet or the like 8, as shown in Fig. 2.

The upper section 6 is formed in its top with a channel or groove 9, which extends longitudinally from its small inner end to its enlarged outer end, where it opens into a transversely-extending recess or cut-away portion 10, formed at the enlarged ends of both of said sections. The channel 9 is adapted to receive the pawl or dog 4, which is formed integral with the handle 3 at its inner end.

The handle is pivoted, as seen in Fig. 2, in

the inner end of the shank upon a transverse pivot-pin 11, so that it has a swinging movement independent of the shank sufficient to permit the pawl to be engaged with and disengaged from the ratchet-teeth 5. The latter are formed at one end of the rotary head 2, which has around its center an annular groove or channel 12, adapted to receive the enlarged outer end of the shank, the two sections of the latter at said end being formed with semicircular bearing portions 13 to enter said channel, as shown in Fig. 4. Both ends of the rotary head project beyond the outer side faces of the shank, and in them are formed sockets 14 of the size and shape of the nuts, bolt-heads, or the like upon which the wrench is to be used.

In operation one of the sockets 14 is engaged with the nut or the head of the bolt to be turned, as shown in Figs. 3 and 4 of the drawings, and the handle 3 is then grasped and turned in a direction that will cause the pawl 4 to engage one of the ratchet-teeth 5, and thereby cause the head 2 and the nut or bolt to turn with the handle and its shank. When the handle is swung in the opposite direction, it turns upon its pivot 11 to disengage the pawl from the ratchet, thus enabling the pawl to take a fresh grip upon the ratchet and enabling the nut or bolt to be continuously turned without removing the wrench from it.

Having thus described my said invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A wrench comprising a shank formed with a longitudinal groove and an apertured end recessed upon one side, a head rotatable in the aperture in said end and formed at one end with an annular series of ratchet-teeth disposed in said recess in the shank, said head having in its opposite projecting ends sockets to receive a nut or bolt-head, and a handle pivoted in said groove at the outer end of the shank and formed with a pawl to work in said groove and engage said ratchet-teeth.

2. A wrench comprising a tapering shank composed of upper and lower sections each having its larger end recessed upon one side and formed with a bearing-aperture, the upper section being also formed with a longitudinal groove, a rotary head having at its center an annular groove to receive the apertured ends of said shank-sections and in its projecting sockets to engage a nut or the like,

an annular series of ratchet-teeth formed on one end of said rotary head and disposed in the recessed portion of said shank, and a handle pivoted in said groove at the small
5 inner end of the shank and formed with an integral pawl to enter said groove in the shank and engage said ratchet-teeth.

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

JOHN R. HUNT.

Witnesses:

F. S. SPRAGUE,
ISIDORE J. PROULX.