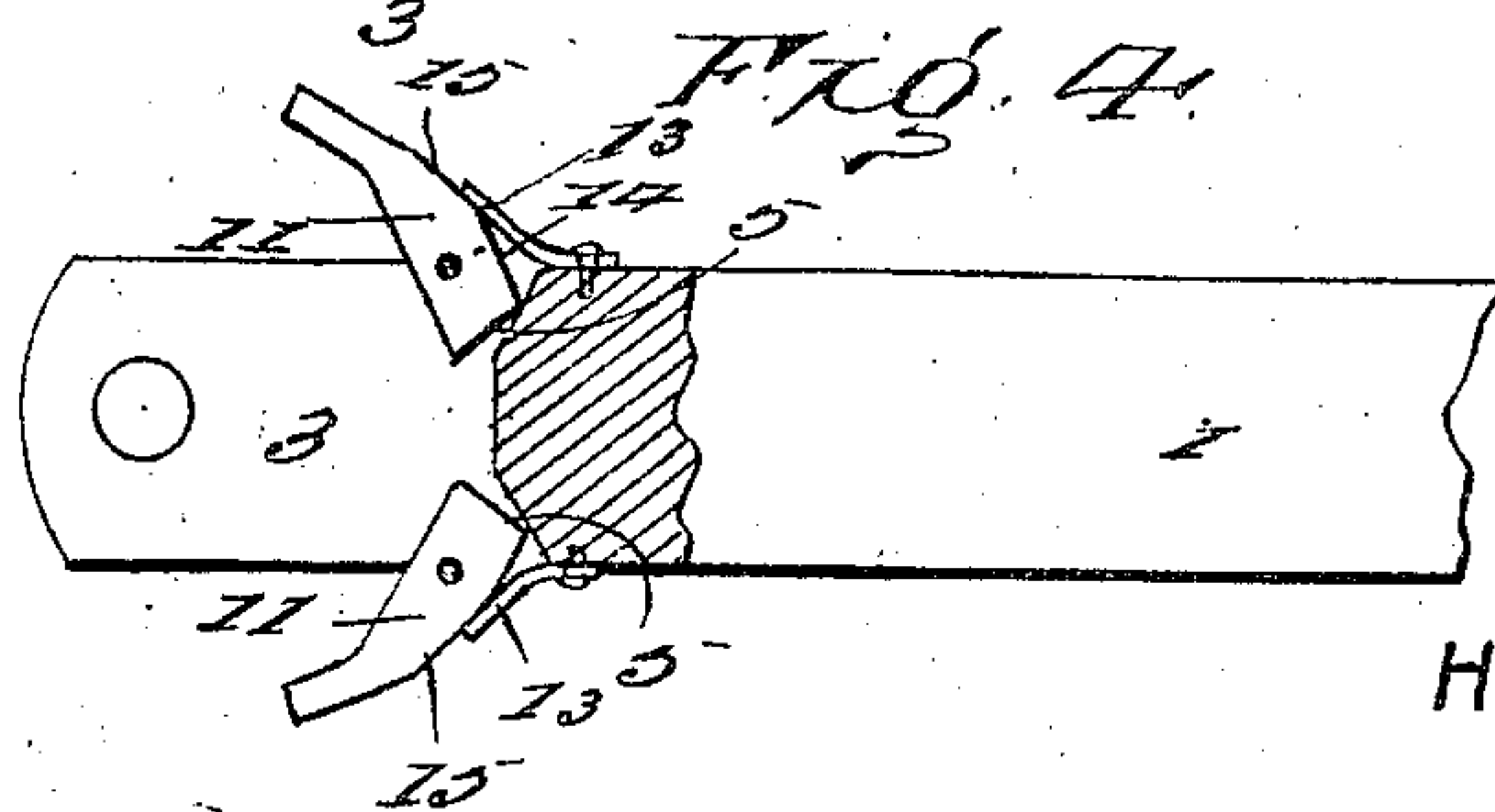
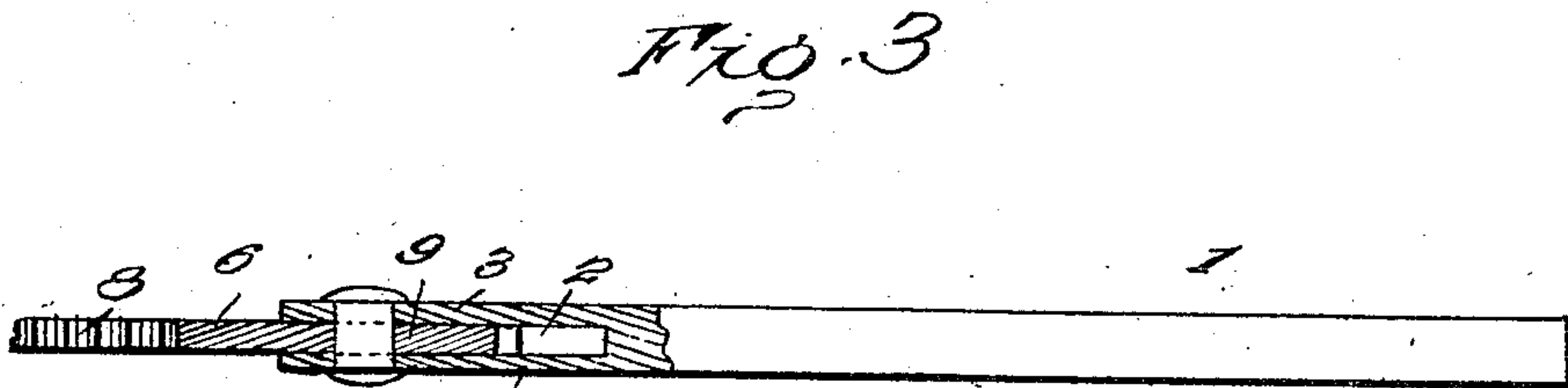
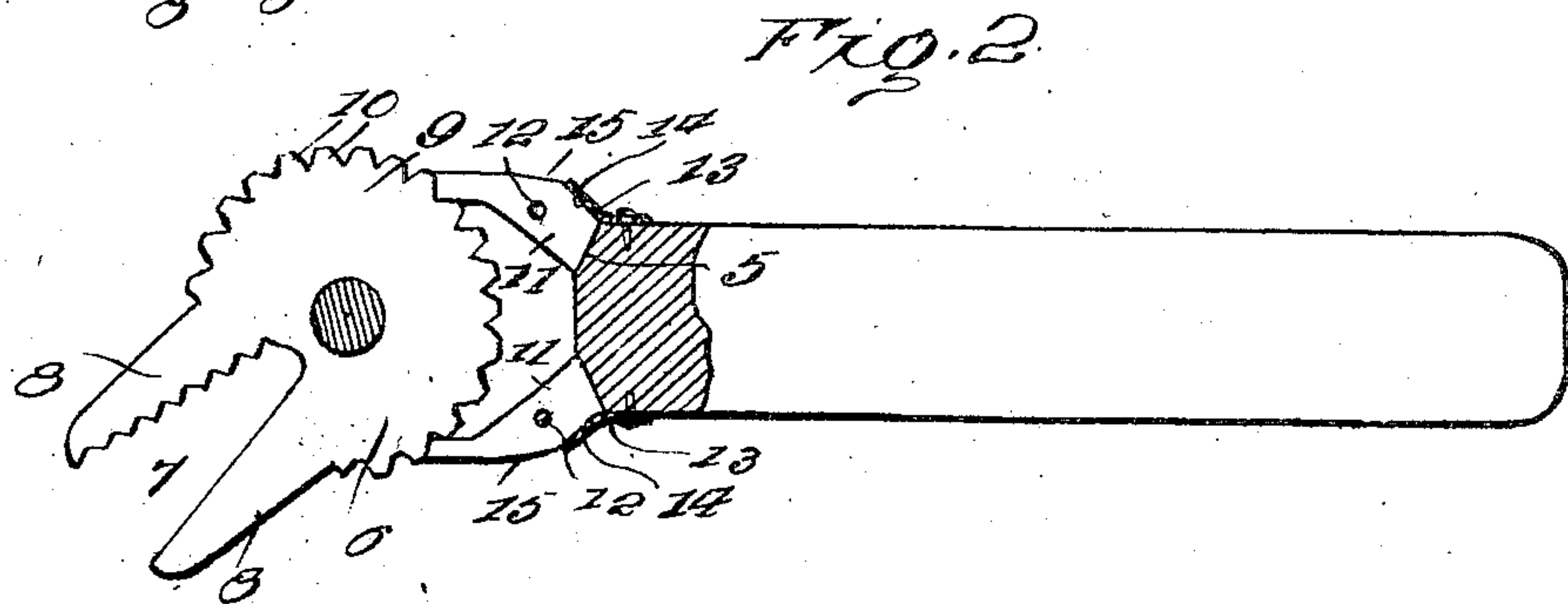
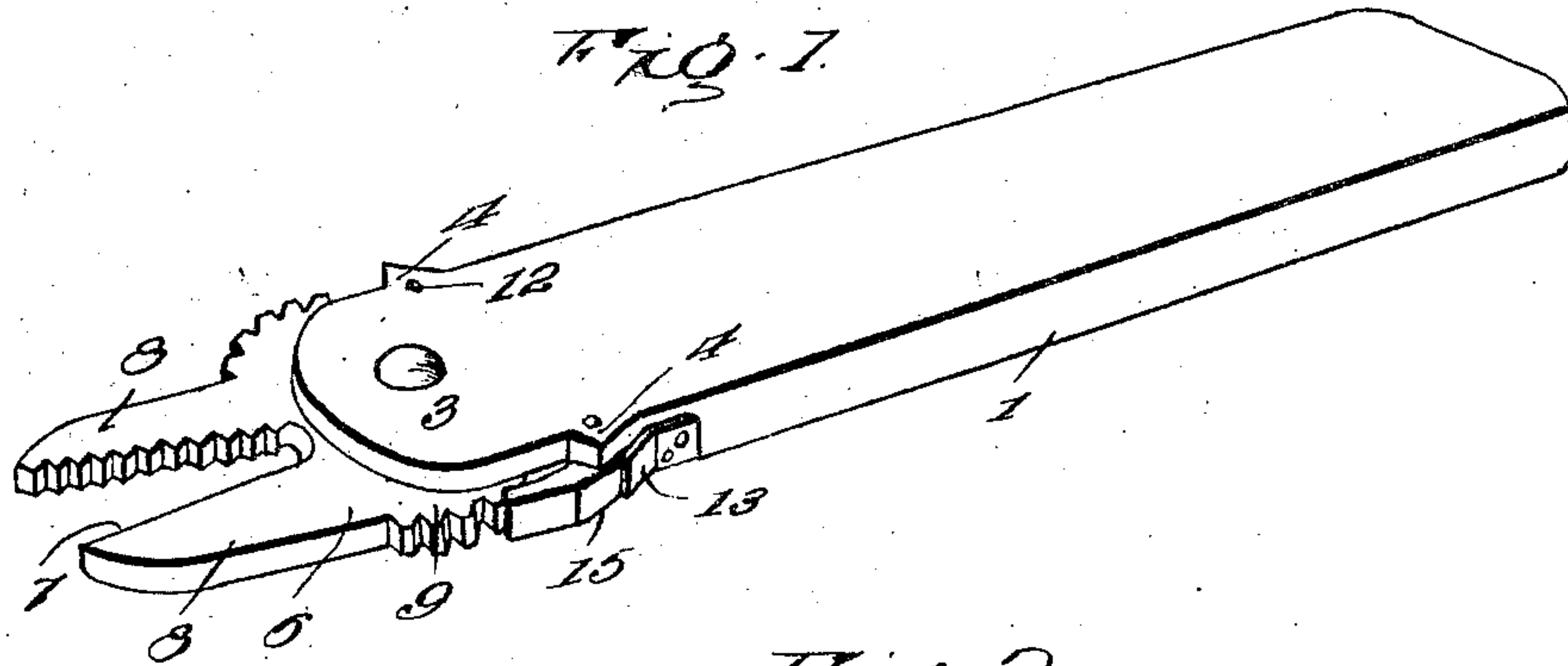


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WRENCH.
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908,185.

Patented Dec. 29, 1908.



Witnesses

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UNITED STATES PATENT OFFICE.

HARRY B. WINFIELD, OF GRESHAM, OREGON.

WRENCH.

No. 908,185.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed April 2, 1908. Serial No. 424,832.

To all whom it may concern:

Be it known that I, HARRY B. WINFIELD, a citizen of the United States, residing at Gresham, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

The object of this invention is a simple, durable and efficient construction of wrench which is particularly adapted for use in confined places since it may be conveniently operated by the reciprocation of the handle, and which embodies primarily relatively stationary "alligator" jaws that may be rigidly held in different positions in angular relation to the handle, according as desired.

With this and other objects in view that will more fully appear as the description proceeds, the invention consists in certain constructions, combinations and arrangements of the parts that I shall hereinafter fully describe and then point out the novel features thereof in the appended claim.

For a full understanding of the invention and the merits thereof, reference is to be had to the following description and the accompanying drawing, in which:

Figure 1 is a perspective view of my improved wrench; Fig. 2 is a plan view thereof partly broken away; Fig. 3 is a longitudinal section; and, Fig. 4 is a detail view showing the pawls in an inoperative position.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawing by the same reference characters.

Referring to the drawing, the numeral 1 designates the handle of my improved wrench, which is formed at its front end with a longitudinal recess 2 communicating with the sides of the handle and forming two spaced members 3. The spaced members 3 are formed at their side edges, near their rear ends, with outstanding alining ears 4, the end wall of the recess 2 being sloped rearwardly near such ears, as indicated at 5.

A head 6 is pivotally mounted between the spaced members 3, and is formed at one end with a V-shaped opening 7 forming two relatively stationary converging jaws 8, the edge of one of which is preferably serrated, as shown. The other end 9 of the head is segmental in form and is provided at its edge

with a series of teeth 10. These teeth are designed to be engaged by the forward ends of two pawls 11 that are pivotally mounted near their rear ends at the opposite sides of the handle and between the corresponding ears 4 by means of screws 12 or the like passing therethrough. The pawls are normally held in engagement with the teeth 10 by means of two flat springs 13 secured to the sides of the handle behind the ears 4, and having their front ends outwardly disposed and arranged to bear against the pawls. The pawls 11 are formed at their outer edges with angularly disposed bearing surfaces 14 and 15, the springs 13 normally pressing against the bearing surfaces 14 to hold the forward ends of the pawls in engagement with the teeth 10. When the pawls 11 are moved outwardly so that the enlargements formed at the junction of the bearing surfaces 14 and 15 are swung past a center, the springs 13 are arranged to press against the bearing surfaces 15 to hold the pawls in an inoperative position out of engagement with the teeth. When the pawls 11 are in engagement with the teeth, the rear ends of the former are arranged to abut against the sloping portions 5 of the end wall of the recess 2, so as to relieve the screws or other pivots 12 from excessive strain.

In the practical use of my improved wrench, the pawls 11 are disengaged from the teeth 10, and the head 6 is rotated so that the "alligator" jaws 8 thereof are at the desired angle to the handle 1, said pawls being then reengaged with the teeth to hold the head rigidly in adjusted position. By throwing the required pawl out of engagement with the teeth, the head 6 may be rotated to a limited extent by the reciprocation of the handle.

Having thus described the invention, what I claim is:

A wrench comprising a handle having a recess at its front end forming spaced members, said members being formed near their rear ends with outstanding alining ears, the end wall of the recess sloping rearwardly toward such ears, a head formed at one end with jaws, the other end of the head being segmental and formed with a plurality of teeth, said head being pivotally mounted at such latter end between the spaced members,

and pawls pivotally mounted between the
corresponding ears and having their forward
ends arranged for engagement with the teeth,
the rear ends of the pawls being adapted to
5 bear against the sloping portions of the end
wall of the recess, as and for the purpose set
forth.

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

HARRY B. WINFIELD. [L. s.]

Witnesses:

A. MEYERS,
EMIL G. KARDELL.