

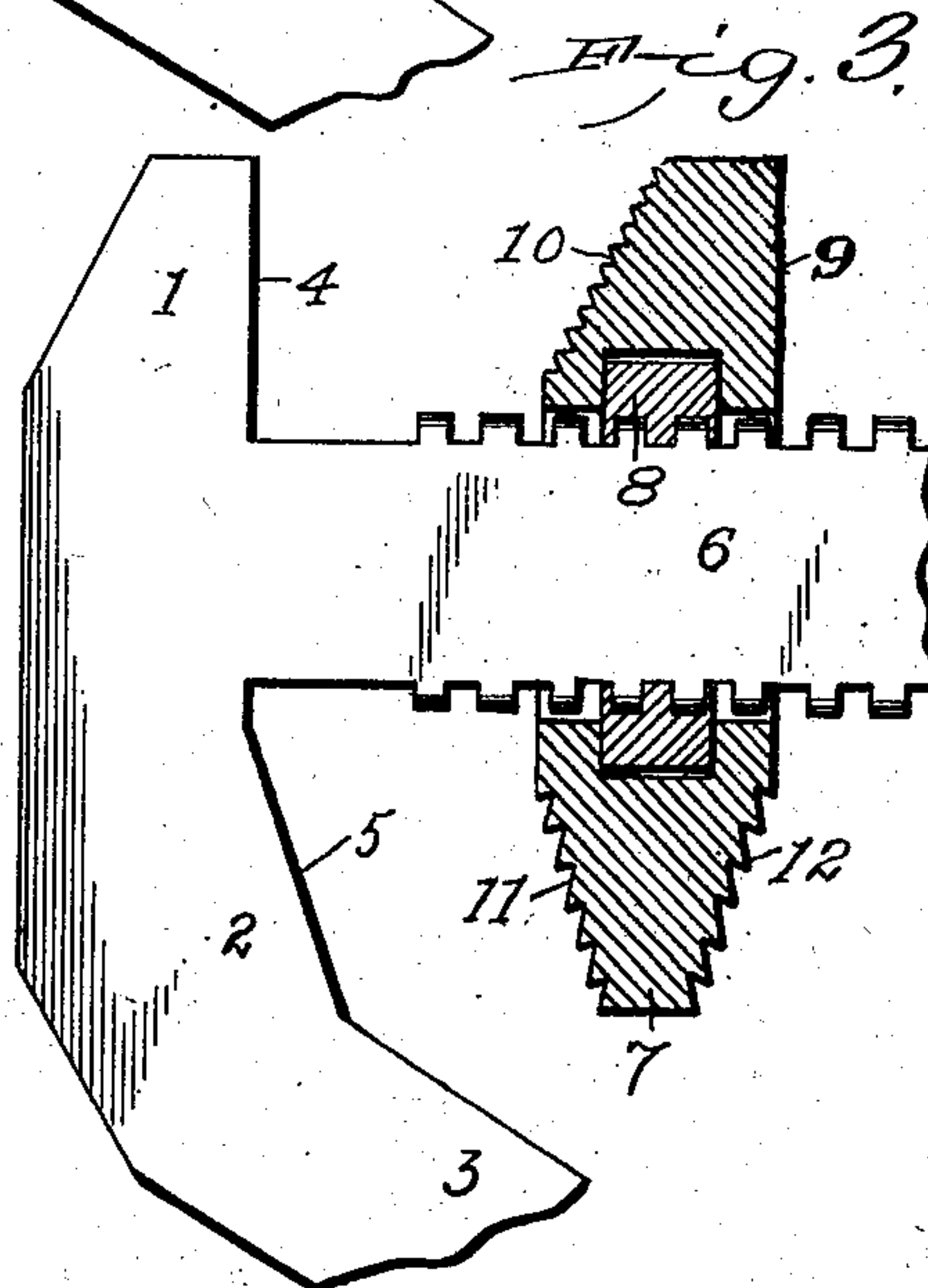
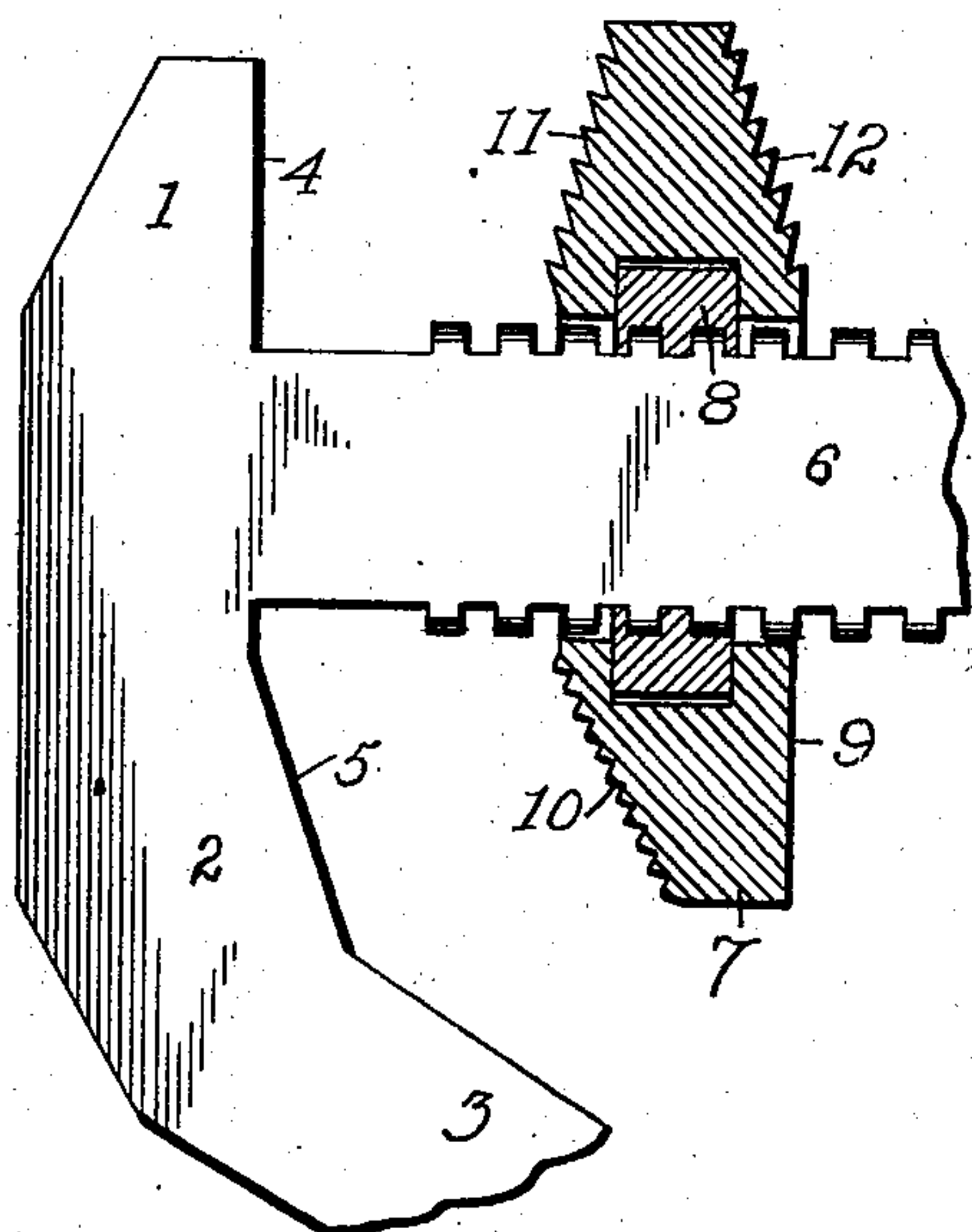
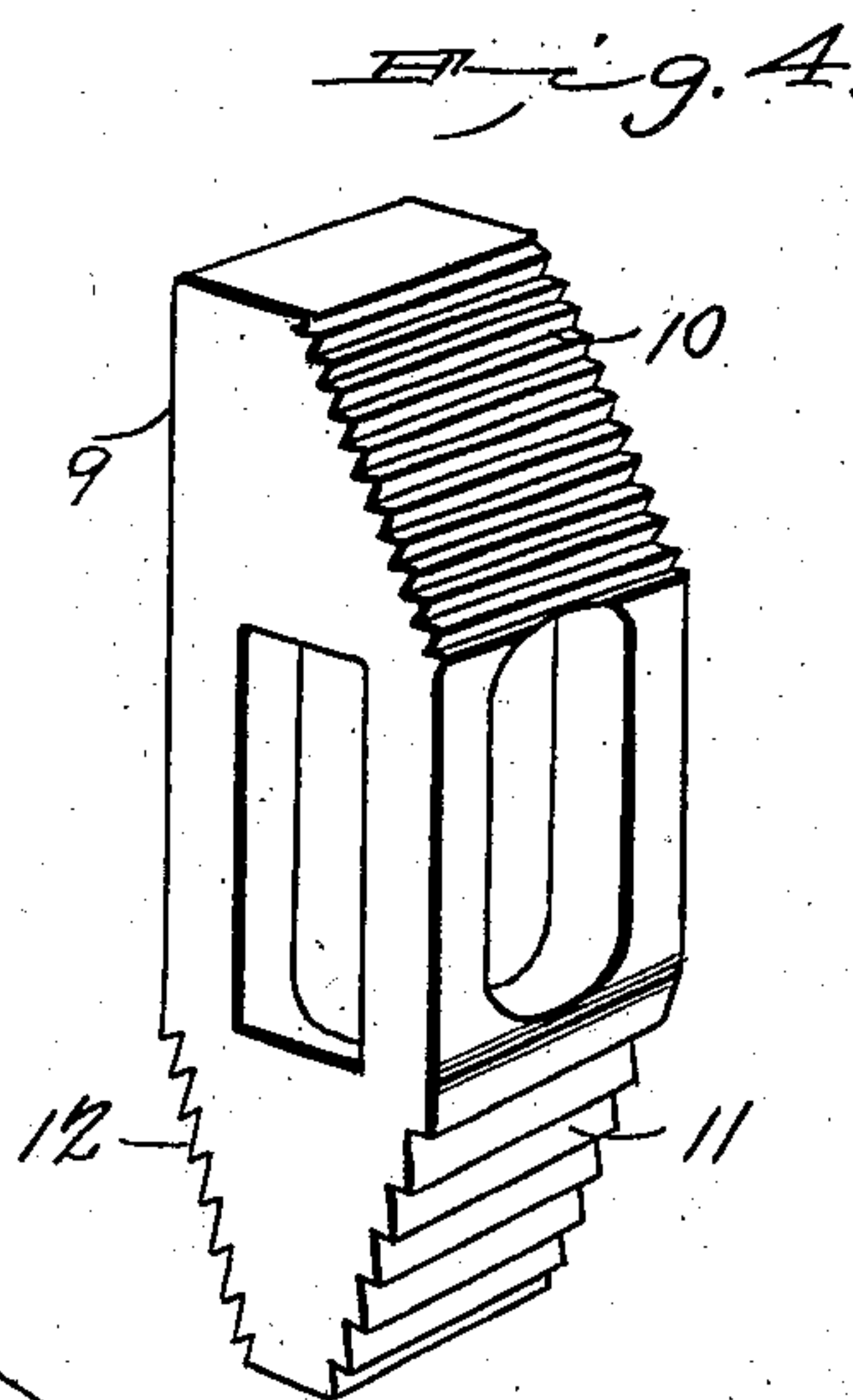
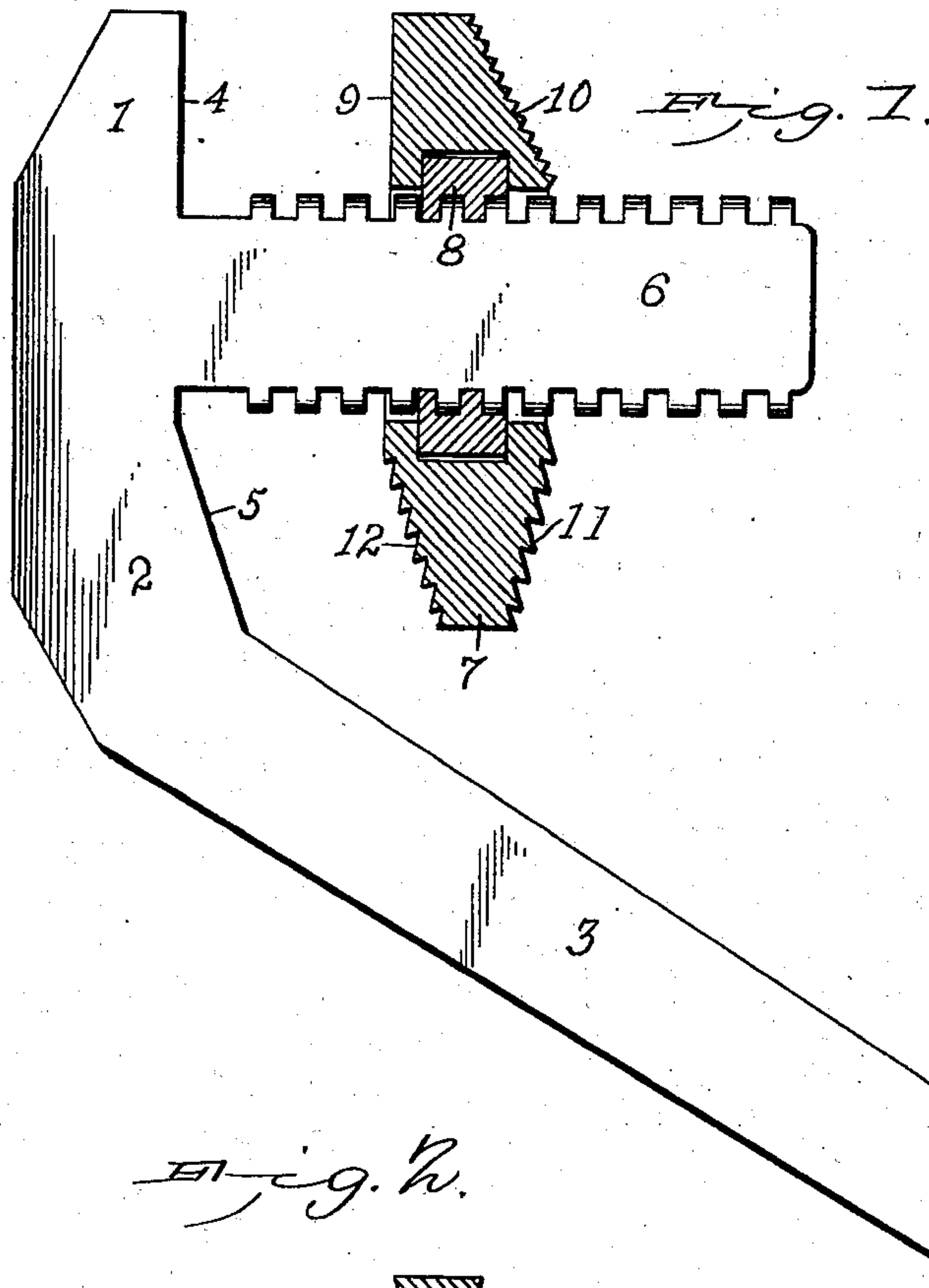
No. 721,444.

PATENTED FEB. 24, 1903.

J. H. HOBSON.
WRENCH.

APPLICATION FILED NOV. 21, 1902.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN H. HOBSON, OF MATTOON, ILLINOIS.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 721,444, dated February 24, 1903.

Application filed November 21, 1902. Serial No. 132,311. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. HOBSON, a citizen of the United States, residing at Mattoon, in the county of Coles and State of Illinois, have invented a new and useful Wrench, of which the following is a specification.

This invention relates to certain improvements in wrenches, and has for its principal object to provide an improved construction of combined pipe and monkey wrench wherein the outer jaw is formed integral with the shank and handle and the inner jaw is removable and reversible and provided with a plurality of engaging jaws of different character for coöperation with the relatively stationary outer jaw.

A further object of the invention is to provide a wrench of the angular-handle type in which the strength of the wrench and the rigidity of the jaws are increased by forming the handle, the shank, the outer jaw, and the threaded stem for the movable jaw of a single piece of metal.

With these and other objects in view the invention consists in the novel construction and arrangement of parts hereinafter described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a side elevation of a wrench constructed in accordance with my invention. Figs. 2 and 3 are similar views of the head of the wrench, illustrating the inner jaw adjusted to different positions. Fig. 4 is a detail perspective view of the reversible inner jaw detached.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The outer jaw 1 is formed integral with a shank 2 and handle member 3, the latter being disposed at an obtuse angle to the engaging face 4 of the outer jaw and being of any desired length. The shank portion 2, which

connects the handle to the jaw, is disposed at an angle to both the handle and the engaging face 4, and its inclined inner face 5 may further be utilized as an additional grip-face when the device is used as a pipe-wrench.

To the outer jaw is secured an integral inwardly-extending threaded stem 6, on which is mounted an adjustable inner jaw 7, having a plurality of grip-faces of different character for coöperation with the grip-faces of the outer jaw. The inner jaw is provided with a central recess for the reception of an adjusting-nut 8, having a milled outer face to facilitate adjustment, the jaw and the nut being both reversible in order that any one of the four grip-faces of said inner jaw may be presented opposite the grip-faces 4 or 5 of the outer jaw.

When the device is to be used as a monkey-wrench, the smooth grip-face 9 of the inner jaw is adjusted to the position illustrated in Fig. 1, while for use as a pipe-wrench any one of the grip-faces 10, 11, or 12 may be adjusted to position, these grip-faces being disposed at different angles and provided with engaging teeth of different pitch in order that the wrench may be properly adjusted in accordance with the character of the work to be performed.

Having thus described the invention, what is claimed is—

1. The combination in a wrench, of an integral outer jaw and handle member, a threaded stem carried thereby, and a reversible inner jaw provided with a plurality of grip-faces and adjustable on said stem.

2. The combination in a wrench, of an integral outer jaw and handle member, a threaded stem carried by said outer jaw, an inner jaw mounted on the stem, a nut for adjusting said inner jaw, and a plurality of grip-faces arranged on the inner jaw and adjustable for coöperation with the outer jaw.

3. The combination in a wrench, of a jaw and handle member, a threaded stem projecting from the jaw, and a reversible jaw adjustably mounted on the stem and provided with a plurality of grip-faces adjustable for coöperation with said stem-carrying jaw.

4. The combination in a wrench, of an outer jaw, a shank and handle formed integral with said outer jaw and disposed at an obtuse angle to the grip-face thereof, a threaded stem
5 projecting inwardly from said jaw, a reversible jaw having a plain grip-face and a plurality of toothed grip-faces of varying character adjustable for coöperation with the grip-face of the outer jaw, and a nut mounted on

the stem for adjusting the distance between 10 said jaws.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN H. HOBSON.

Witnesses:

E. J. HOBSON,
H. H. HOBSON.