No. 756,495. PATENTED APR. 5, 1904.

A. B. GREEN.

WRENCH.

APPLICATION FILED DEC. 22, 1903.

NO MODEL.

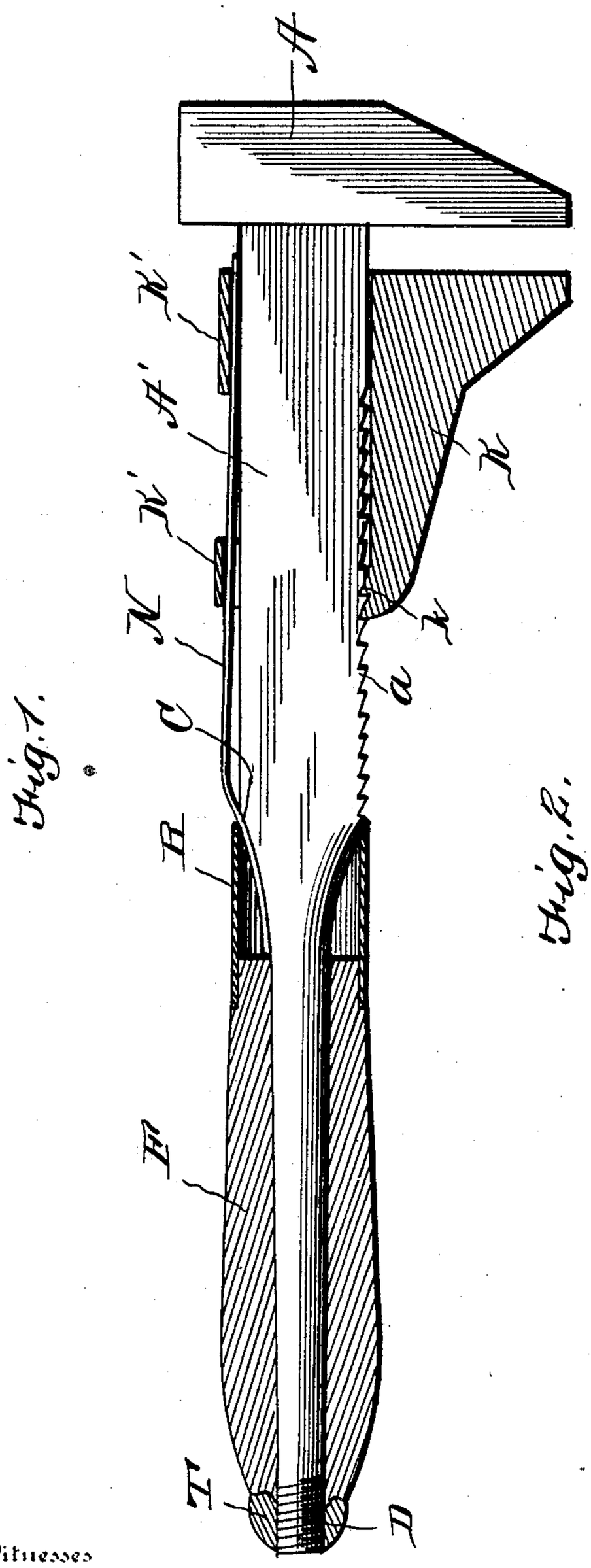

Fig. 1.

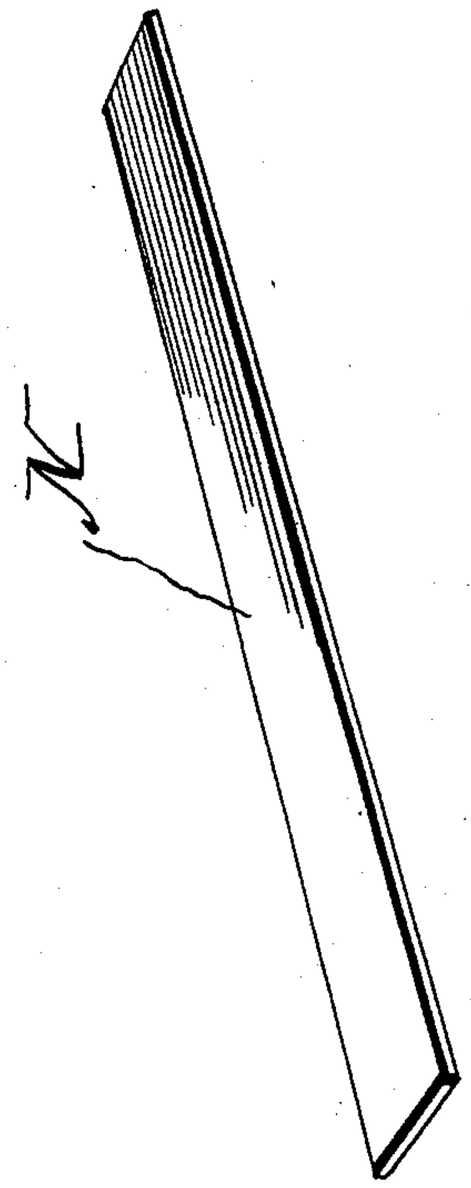

Fig. 2.

Witnesses

R. A. Boswell.

A. L. Hough.

Inventor

A. B. Green,

By Franklin H. Hough

Attorney.

No. 756,495. Patented April 5, 1904.

UNITED STATES PATENT OFFICE.

ALMON B. GREEN, OF LYONS, OHIO.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 756,495, dated April 5, 1904.

Application filed December 22, 1903. Serial No. 186,188. (No model.)

To all whom it may concern:

Be it known that I, ALMON B. GREEN, a citizen of the United States, residing at Lyons, in the county of Fulton and State of Ohio, have invented certain new and useful Improvements in Wrenches; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in wrenches; and the object of the invention is to produce a wrench having a spring-pressed sliding jaw adapted to normally hold the sliding jaw in an adjusted position and the invention comprises the employment of a straight spring one end of which is held in a recessed portion of the shank of the fixed jaw by means of a collar or portion of the handle and so arranged that the spring will normally hold a portion of the sliding jaw in engagement with one of the teeth upon the shank portion of the fixed jaw, but allowed to yield when pressure is applied to the opposite edge of the sliding jaw to allow the same to be adjusted.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings Figure 1 is a central sectional view longitudinally through a wrench, showing my improvements applied thereto. Fig. 2 is a detail view of the spring.

Reference now being had to the details of the drawings by letter, A designates a fixed jaw with a shank portion A′, having serrations *a* upon one face thereof, and at any suitable location on the rear edge of said shank portion is a beveled shoulder C, and the portion toward the rear end of the shank of the fixed jaw from said shoulder is tapering, as shown, and terminates in a threaded end D, adapted to receive and hold a handle F thereon.

K designates a sliding jaw having straps K′ adapted to embrace the shank portion of the fixed jaw and slide thereon. A portion of the sliding jaw has teeth *k* designed to normally engage the teeth *a* of the shank portion of the fixed jaw to normally hold the jaw in adjusted position.

N designates a flat spring which is adapted to be held yieldingly upon the back of the shank of the fixed jaw in such a manner as to normally hold the teeth *k* upon the sliding jaw in engagement with the teeth *a*, but so arranged that the spring will yield when pressure is applied to the straps of the sliding jaw for disengaging the teeth. One end of said spring is placed over said beveled shoulder, and its other end is adapted to be held in the position shown in Fig. 1 of the drawings by means of a collar R, which is made to conform to the portion of the shank of the fixed jaw on which said collar is mounted. The handle is inserted in said collar, and when the nut T is placed upon the shank portion of the fixed jaw and screwed tight against the handle the latter will force the spring tightly against said beveled shoulder and hold the same securely in place.

From the foregoing it will be observed that a simple and efficient means is provided for holding the sliding jaw of a wrench in an adjusted position and means for allowing the jaw to be easily and quickly released from the teeth of the shank portion of the fixed jaw, and by the employment of a straight spring, which is not fastened to the shank of the fixed jaw at either end, but simply held frictionally by the collar in the manner described and illustrated. By having the spring straight and held against the beveled shoulder there is no liability of the spring buckling or breaking.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A sliding-jaw wrench comprising a fixed jaw with shank having serrations upon its edge, a sliding jaw mounted upon said shank portion and having teeth for engagement with said serrations, a straight spring unattached to said shank portion, a collar frictionally holding one end of said spring over a shoulder on the rear edge of the shank of the fixed jaw, means for holding said collar against the

spring, the latter adapted to normally hold the sliding jaw in an adjusted position, as set forth.

2. A sliding-jaw wrench comprising, in combination with the shank portion of the fixed jaw having serrations thereon, a sliding jaw mounted upon said shank portion and having teeth for engagement with said serrations, a flat spring unattached to the shank portion, a collar fitted over said shank portion, and adapted to frictionally hold said spring against a beveled shoulder upon the rear edge of the shank portion of the fixed jaw, a handle bearing against said collar, and a threaded nut adapted to force the handle and collar against said spring, as set forth.

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

ALMON B. GREEN.

Witnesses:

F. B. GRIFFIN,

B. R. RICHARDSON.