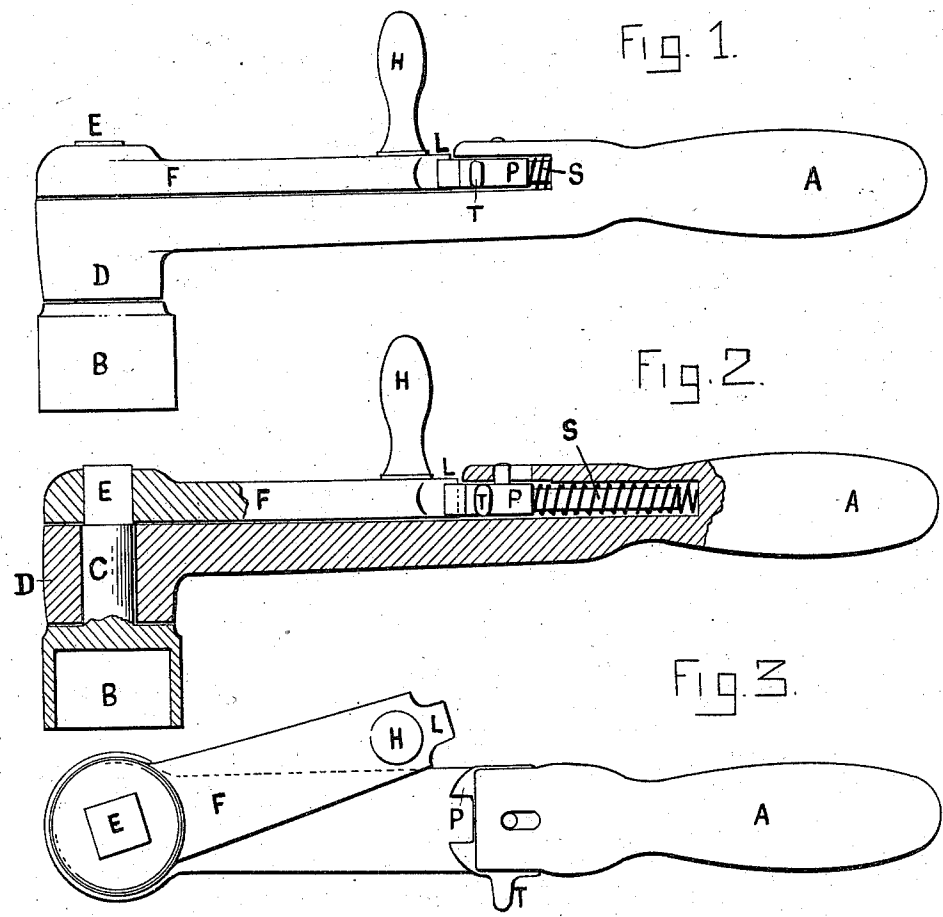


(No Model.)

J. GRANNIS.
AXLE NUT WRENCH.

No. 558,874.

Patented Apr. 21, 1896.



WITNESSES

INVENTOR

Henry Boughton
E. G. Emanuel

John Grannis.
By Sylvester Walker
Attorney

UNITED STATES PATENT OFFICE.

JOHN GRANNIS, OF LANCASTER, NEW HAMPSHIRE.

AXLE-NUT WRENCH.

SPECIFICATION forming part of Letters Patent No. 558,874, dated April 21, 1896.

Application filed January 23, 1896. Serial No. 576,580. (No model.)

To all whom it may concern:

Be it known that I, JOHN GRANNIS, of Lancaster, in the county of Coos and State of New Hampshire, have invented an Improvement in Axle-Nut Wrenches, of which the following is a specification.

The object of my invention is to provide a more convenient and efficient axle-nut wrench than heretofore constructed for the purpose; and it consists in the construction, combination, and arrangement of the several parts of the device, as hereinafter more fully described, and specifically set forth in the claims.

In the drawings hereto annexed, which form a part of this specification, and to which reference is made, Figure 1 represents a side elevation showing an axle-nut wrench constructed according to my invention. Fig. 2 represents a vertical longitudinal sectional elevation of the same. Fig. 3 represents a top plan of the axle-nut wrench, showing the crank-handle slightly rotated from the line of the main lever-handle.

A represents the main power or lever handle, having at its opposite or inward end a nut-socket B, provided centrally with a projecting stud or pivot-axle C, fitted loosely within the corresponding opening in the projecting boss D, surrounding the said axle C, and formed on the end of the said lever-handle A and resting upon the upper surface of the said nut-socket B, as shown in Fig. 2.

The axle or stud C is extended above the said boss D in a square tenon E, upon which is fitted one end of the crank F, near the opposite end of which is provided a projecting handle H, by means of which the said nut-socket B may be rotated rapidly by one hand, while the other hand grasps the main lever-handle A, through which the axle-nut may

be first loosened and then turned off more rapidly by the shorter crank-handle F H and then screwed on or back to its normal position, then forced on harder by means of the main handle A, as desired, the rear end L of the said crank-handle being confined temporarily in position upon the said main handle by means of the spring-catch P and inclosed spiral spring S, which may be compressed by the thumb bearing against the short projection T on the said spring-catch P, as shown in Fig. 3, thereby releasing the said catch from the short projection L, and thereby permit the said crank-handle to be rotated or operated independent of the said main lever-handle A, or as may be desired, to remove the axle-nut in a more convenient and rapid manner. The said spring-catch for retaining the said crank-handle in position on the said lever-handle when not being operated may be modified, without departing from the essential features of my present invention, by employing any well-known mechanical devices adapted for the purpose.

Having thus described my invention, I claim—

An axle-nut wrench consisting of the lever-handle A having at its inward end a pivoted nut-socket B, provided with a stud C having a square tenon E, the crank F connected to the said tenon at one end and provided at the opposite end with a handle H and having a short projection L, the spring S, and catch P having projection T, all being constructed, combined and arranged to operate, substantially as shown and described.

JOHN GRANNIS.

Witnesses:

SYLVENUS WALKER,
GEORGE F. SHAW.