E. L. LANSBERRY. WRENCH. APPLICATION FILED MAR. 15, 1904.

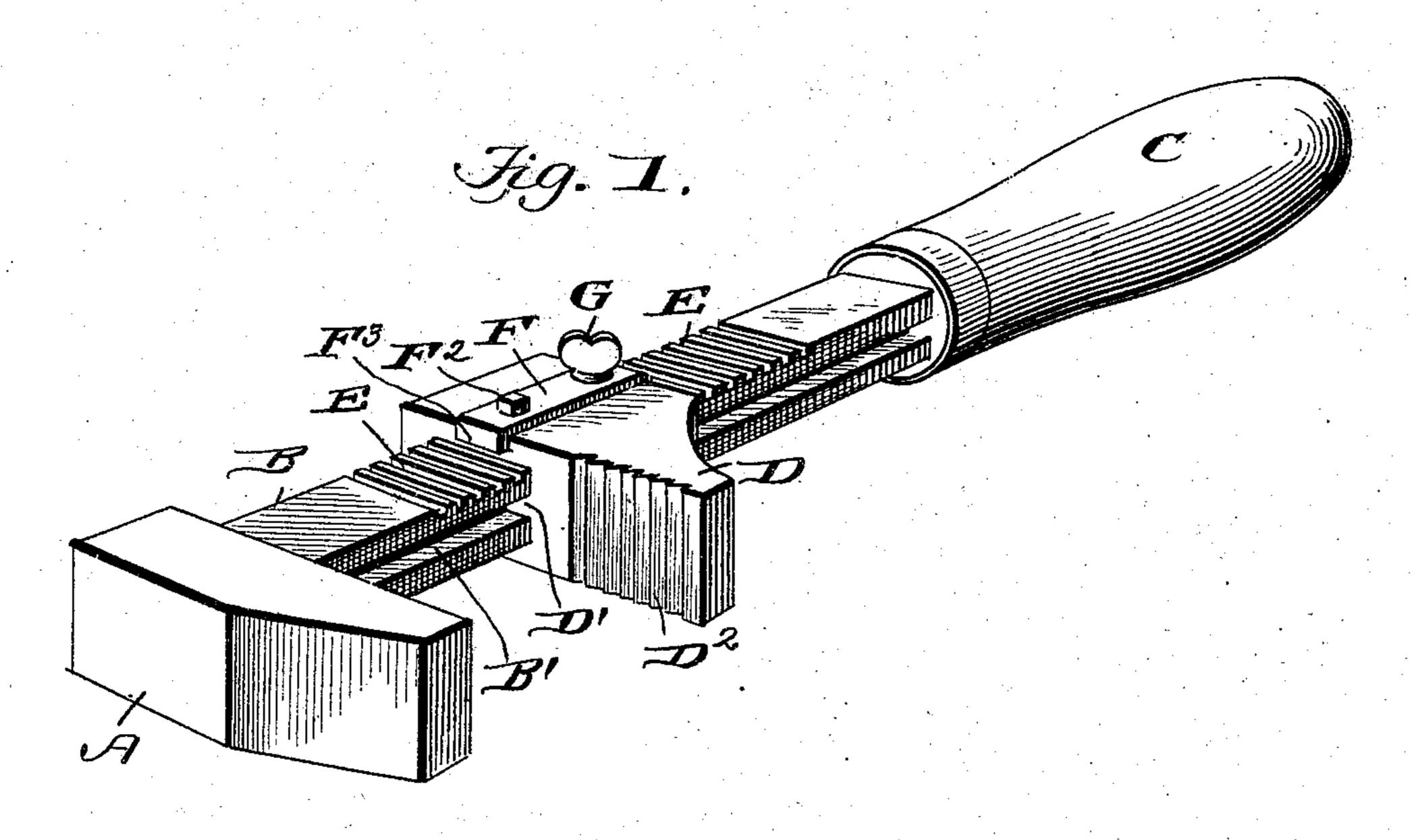
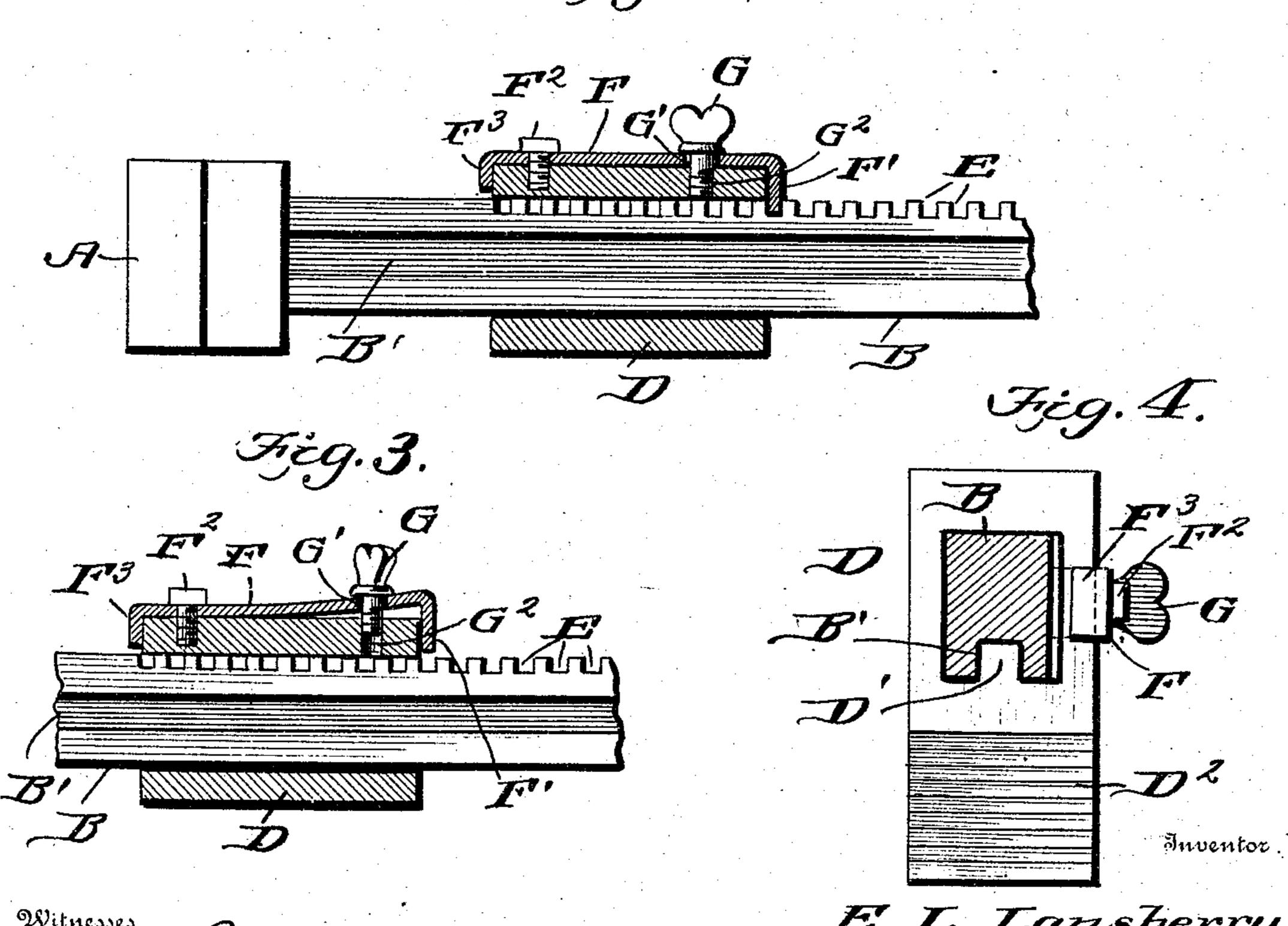


Fig. Z.



Mod Roudel, Colgan B M Hoarf E. I. Lansberry.

Mearal Brock

Attorneys

United States Patent Office.

EDWARD L. LANSBERRY, OF McDONALDTON, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO JOHN BAKER, OF McDONALDTON, PENNSYLVANIA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 785,313, dated March 21, 1905.

Application filed March 15, 1904. Serial No. 198,289.

To all whom it may concern:

Be it known that I, EDWARD L. LANSBERRY, residing at McDonaldton, in the county of Somerset and State of Pennsylvania, have invented a new and useful Improvement in Wrenches, of which the following is a specification.

This invention relates generally to wrenches, and more particularly to that class thereof known as "sliding-jaw nut-wrenches;" and the object of the invention is to provide a wrench in which the sliding jaw can be quickly and easily adjusted to any desired point and then securely locked in that adjusted position, thereby preventing the possibility of the said movable jaw moving after it has once been properly adjusted.

With this object in view the invention consists in making the shank of the wrench with a series of transverse grooves and in providing the sliding jaw with a spring-plate, which spring-plate will normally disengage itself from the grooved shank, said spring-plate being brought into engagement with the grooved shank by means of a thumb-screw for the purpose of holding the sliding jaw in a fixed position.

The invention consists also in certain details of construction hereinafter described and fully pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a perspective view of a wrench constructed in accordance with my invention. Fig. 2 is a sectional plan view, the spring-plate being shown in engagement with the grooved shank. Fig. 3 is a sectional plan view, the spring-plate being disengaged from the grooved shank. Fig. 4 is a transverse sectional view of the shank, the sliding jaw being shown in elevation.

In constructing a wrench in accordance with my invention I employ a fixed jaw A and a shank B, which is either integral with the fixed jaw A or rigidly fastened thereto and at its opposite end is provided with the usual construction of a handle C.

D indicates the sliding jaw, which is adapted to slide back and forth upon the shank, and

for the purpose of guiding and steadying the sliding jaw I prefer to construct it with a longitudinal rib D', which is adapted to engage and slide in the longitudinal groove B', produced in the shank B. It will be understood, however, that these details of construction are not absolutely necessary, and, furthermore, it will be noted that I have serrated the inner face of the sliding jaw, as shown at D', in order to adapt the wrench for use as a pipe-wrench as well as a nut-wrench.

In order to lock the sliding jaw at any de- 60 sired point, I provide a series of transverse grooves E. In one side of the shank and upon one side of the sliding jaw I arrange a springplate F with an inwardly-turned end F', which is adapted to engage one of the grooves and 65 hold the sliding jaw in a locked position. This spring-plate F is rigidly attached to the side of the sliding jaw by means of a bolt F², and the end adjacent said bolt is turned inwardly, as shown at F³, in order to embrace the edge 70 of the sliding jaw, and thereby preventing any pivotal movement of said spring-plate. This spring-plate is constructed in such a manner that its inherent elasticity will tend to throw the end F' outwardly, as shown in Fig. 3, 75 thereby leaving the sliding jaw free to move back and forth upon the shank, and in order to force the said end F' inwardly and into engagement with the grooved shank I employ a thumb-screw G, which passes through an ap- 80 erture G' produced in the spring-plate and engages a threaded opening G² produced in the side of the sliding jaw. Thus it will be seen that after the sliding jaw has been adjusted to the proper position the thumb-screw can 85 be given a turn, which action will draw the spring-plate inwardly and force its inwardlyextending angular end F' into engagement with the groove which lies nearest the end of the sliding jaw, as most clearly shown in Fig. 2. 90

It will thus be seen that I provide an exceedingly cheap, simple, and efficient construction of wrench and one in which the sliding jaw can be quickly and easily securely locked as soon as the proper adjustment has 95 been obtained.

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

Letters Patent, is—

1. A wrench comprising a fixed jaw and a 5 shank, said shank being longitudinally and transversely grooved, a sliding jaw movable upon the shank and having a rib adapted to engage the longitudinal groove of the shank and a spring-actuated plate attached to the side 10 of the sliding jaw and having an inwardlyprojecting angular end adapted to engage the transversely-grooved portion of the shank, and a thumb-screw carried by the spring-plate, and adapted for bringing said end into engage-15 ment with the shank.

2. A wrench comprising a fixed jaw and a transversely - grooved shank longitudinally grooved on one side, a sliding jaw movable upon the shank, a spring-plate having an inwardly-extending angular end adapted to en- 20 gage the grooved shank and a thumb-screw passing through the spring-plate and engaging a threaded aperture in the sliding jaw whereby the angular end of the said springplate is brought into engagement with the 25 grooved portion of the shank. EDWARD L. LANSBERRY.

Witnesses:

CHAS. E. DAVIES, R. C. Heffley.