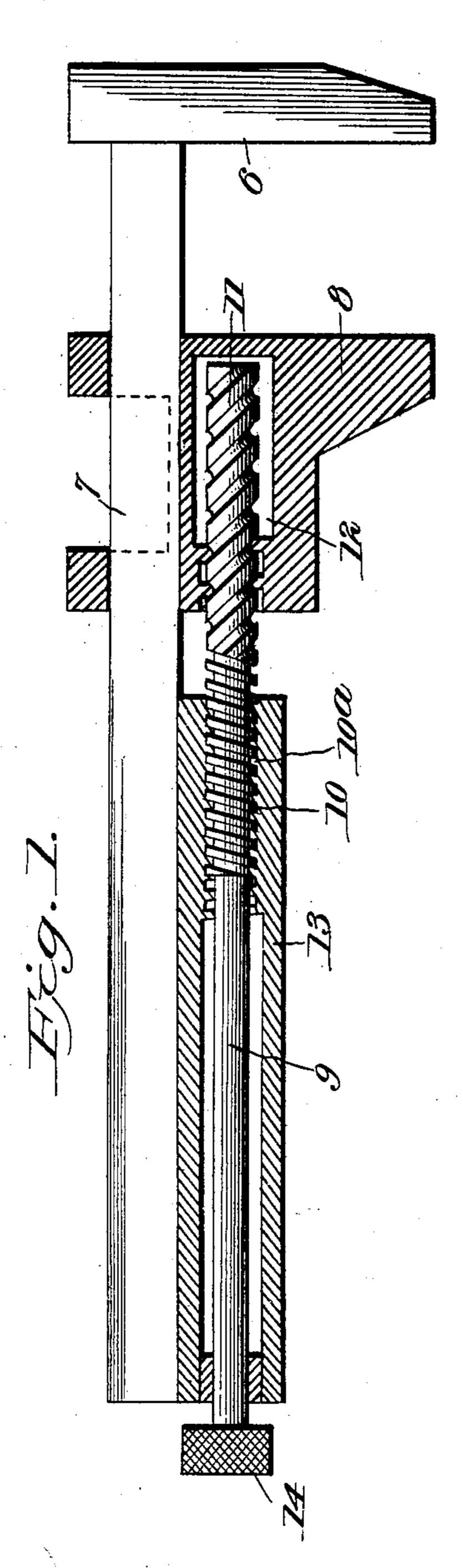
L. KULES. WRENCH.

APPLICATION FILED OCT. 19, 1903.

NO MODEL.



Witnesses

620acken, Get John Inventor

heo mues....

Attornand

UNITED STATES PATENT OFFICE.

LEO KULES, OF SOUTH LORAIN, OHIO.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 762,537, dated June 14, 1904.

Application filed October 19, 1903. Serial No. 177,615. (No model.)

To all whom it may concern:

Be it known that I, Leo Kules, a citizen of the United States, residing at South Lorain, in the county of Lorain and State of Ohio, 5 have invented certain new and useful Improvements in Wrenches; and I do hereby 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 drawing, and to the figures of reference marked thereon, which forms a part of this specification.

This invention relates particularly to that class of monkey-wrenches in which the movable jaw is actuated by a screw having right and left threads, one of which engages with the handle or fixed part of the wrench and the other of which engages with the said jaw.

The object of the invention is to improve the construction of such wrenches by providing more convenient means for the manipulation of the jaw and by providing an improved construction of screw with respect to its bearings upon the other parts of the wrench.

The accompanying drawing is a longitudinal sectional view of the wrench.

Referring specifically to the drawing, 6 indicates the fixed jaw, on the shank 7 of which

3° the movable jaw 8 is slidable.

9 indicates a spindle having right and left threaded portions 10 and 11, the latter of which takes in threads produced in a recess or hollow 12 within the movable jaw. The 35 spindle is mounted in bearings in a housing

13, attached to the shank and forming part of the handle of the wrench.

The threads 10 engage corresponding threads 10°, formed in the end of the housing nearest the movable jaw. The spindle extends lengthwise through the housing and out beyond the foot of the wrench, where it has a nurled head 14, whereby it may be turned. The location of the nurled head at this point makes it more convenient to manipulate the 45 wrench, especially in tight quarters, than if located under the shank, as usual.

The quick action produced by the opposite threads is obvious, and the handle construction gives a fair hold and covers and protects 50 the screw adjustment. I am aware that it is not broadly new to use an oppositely-threaded screw to move one jaw of a wrench, and this I do not claim; but

What I do claim, and desire to secure by Let- 55 ters Patent, is—

In a wrench, the combination with a fixed jaw and shank, of a movable jaw slidable on the shank, a handle-housing on the shank and threaded internally, and a spindle, having 65 right and left threads engaging respectively in the housing and movable jaw, extending through the housing and having a finger-piece thereon at the foot of the wrench.

In testimony whereof I affix my signature in 70 presence of two witnesses.

LEO KULES.

Witnesses:

JOHN A. BOMMHARDT, CATHERINE BOMMHARDT.