

No. 749,668.

PATENTED JAN. 12, 1904.

N. G. FORSLUND.

WRENCH.

APPLICATION FILED JUNE 11, 1903.

NO MODEL.

Fig. 1.

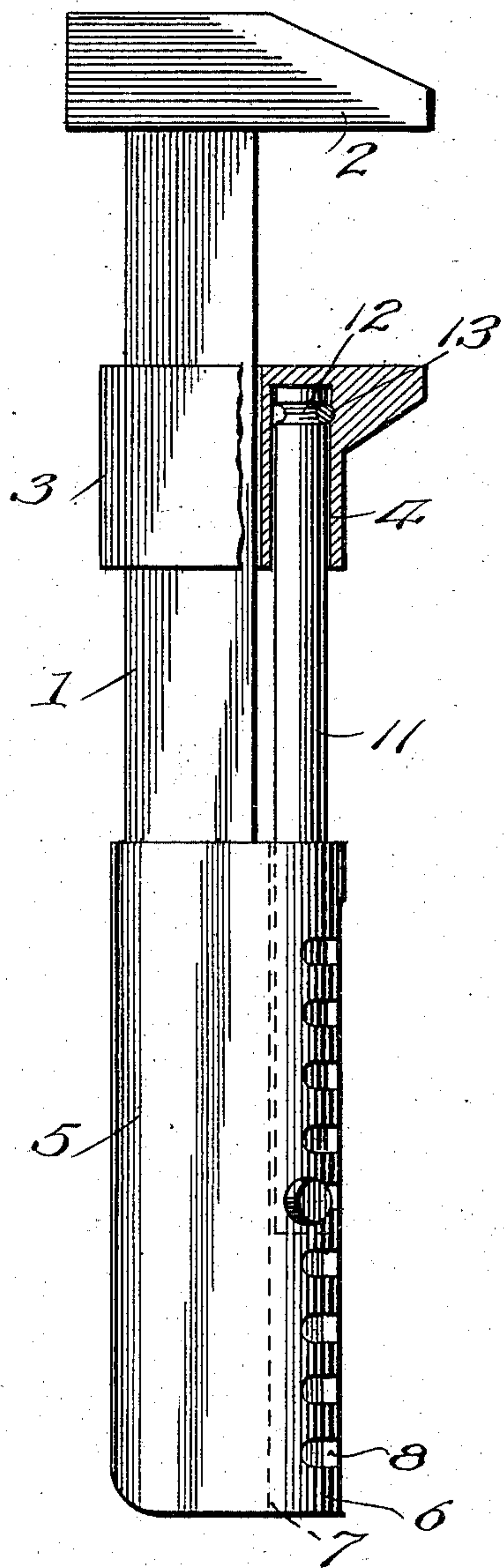
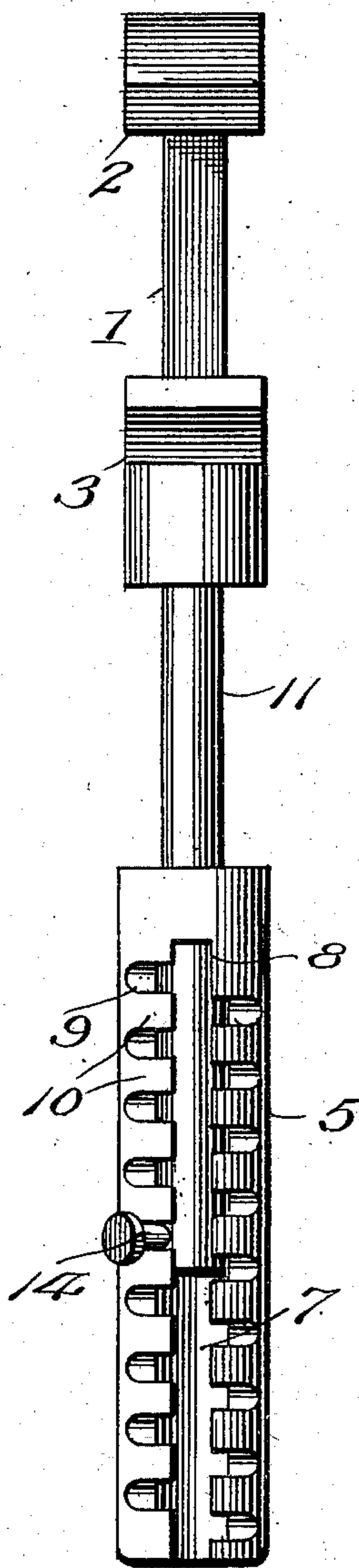


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

NOBLE G. FORSLUND, OF CHEROKEE, IOWA.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 749,668, dated January 12, 1904.

Application filed June 11, 1903. Serial No. 161,014. (No model.)

*To all whom it may concern:*

Be it known that I, NOBLE G. FORSLUND, a citizen of the United States, residing at Cherokee, in the county of Cherokee and State of Iowa, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to wrenches having a rigid jaw and a movable or adjustable jaw; and the primary object of the same is to provide simple and effective means for conveniently operating the adjustable jaw and holding said jaw in positive position after adjustment.

The invention consists in the construction and arrangement of the several parts, which will be hereinafter more fully described and claimed.

In the drawings, Figure 1 is a side elevation of a wrench embodying the features of the invention and shown broken away in part. Fig. 2 is an edge elevation thereof.

Similar numerals of reference are employed to indicate corresponding parts in the views.

The numeral 1 designates a shank having a rigid jaw 2 at one end and an adjustable jaw 3 freely slidable thereon. The jaw 3 has a bore 4 opening out through the rear end thereof to one side of the opening therethrough for the reception of the shank 1. The shank 1 has an enlarged handle or grip 5 projected a greater distance on one side of the shank than on the other side of the latter, as at 6. The projected portion 6 of the handle or grip is formed with a bore 7 in line with the bore 4 of the jaw 3, said bore 6 opening out through one side of the handle or grip by means of a slot 8. The opposite walls of the slot 8 have seat-slots 9 communicating with the said slot 8 and arranged in planes at right angles to the latter. The seat-slots 9 in the opposite wall are in alternate relation, so that the slots in one wall are in transverse alinement with the webs 10 between the slots of the other wall to increase the range of adjustment in a manner which will be presently explained.

Slidably mounted in the bore 7 is an adjusting spindle or rod 11, which is rotatably held in the bore 4 of the jaw 3. The forward extremity of this spindle or rod 11 is formed

with a circumferential groove 12, which is engaged by a key-pin 13, extending transversely through the jaw, as clearly shown by Fig. 1. Near the rear end of the spindle or rod 11 a headed stud 14 is secured and projects outwardly for engagement with the seat-slots 9 in either wall of the slot 8. The stud 14 is of such length that the head thereof will be located exteriorly of the grip or handle 5 and also has such diameter that it may be easily forced into or removed from any one of the seat-slots, as well as longitudinally of the slot 8.

In adjusting the jaw 3 the headed stud 14 is grasped and the spindle or rod 11 turned until said stud is free to move longitudinally through the slot 8 in either a backward or forward direction. After the jaw 3 has been adjusted in relation to the jaw 2 as desired the headed stud is turned laterally into the nearest seat-slot 9, which may be in either wall of the slot 8, and thus the jaw 3 will be firmly held against movement. By this means it will be seen that the jaw 3 can be quickly adjusted, and the degree of adjustment will be extended within the proportions of the grip or handle by the alternate arrangement of the seat-slots 9 in the opposite walls of the slot 8 without requiring a cumbersome and inconvenient extension of the grip or handle.

It is proposed to construct the entire wrench of metal, and the several parts may be quickly assembled, and when properly associated a wrench of superior durability is produced.

It will be understood that changes in the proportions and dimensions of the several parts may be made at will without departing from the spirit of the invention.

Having thus fully described the invention, what is claimed as new is—

1. A wrench having a shank with a rigid jaw and a handle with a bore, the said bore having an outwardly-opening slot with seat-slots alternately arranged in the opposite walls thereof, a sliding jaw on the shank, and a spindle rotatably secured in the sliding jaw and alternately movable in the bore of the handle, the rear extremity of the spindle having a headed stud to engage the said seat-slots.

2. In a wrench, the combination of a shank

having a rigid head at one end and a handle  
with a lateral projection at the opposite end,  
the said lateral projection of the handle being  
formed with a bore having an outwardly-  
5 opening slot with seat-slots in the opposite  
walls thereof arranged in alternation, a jaw  
slidably mounted on the shank, and a spindle  
rotatable in the said latter jaw and longitu-

dinally shiftable in the handle, the said spin-  
dle having means for engaging the seat-slots. 10

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

NOBLE G. FORSLUND.

Witnesses:

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