

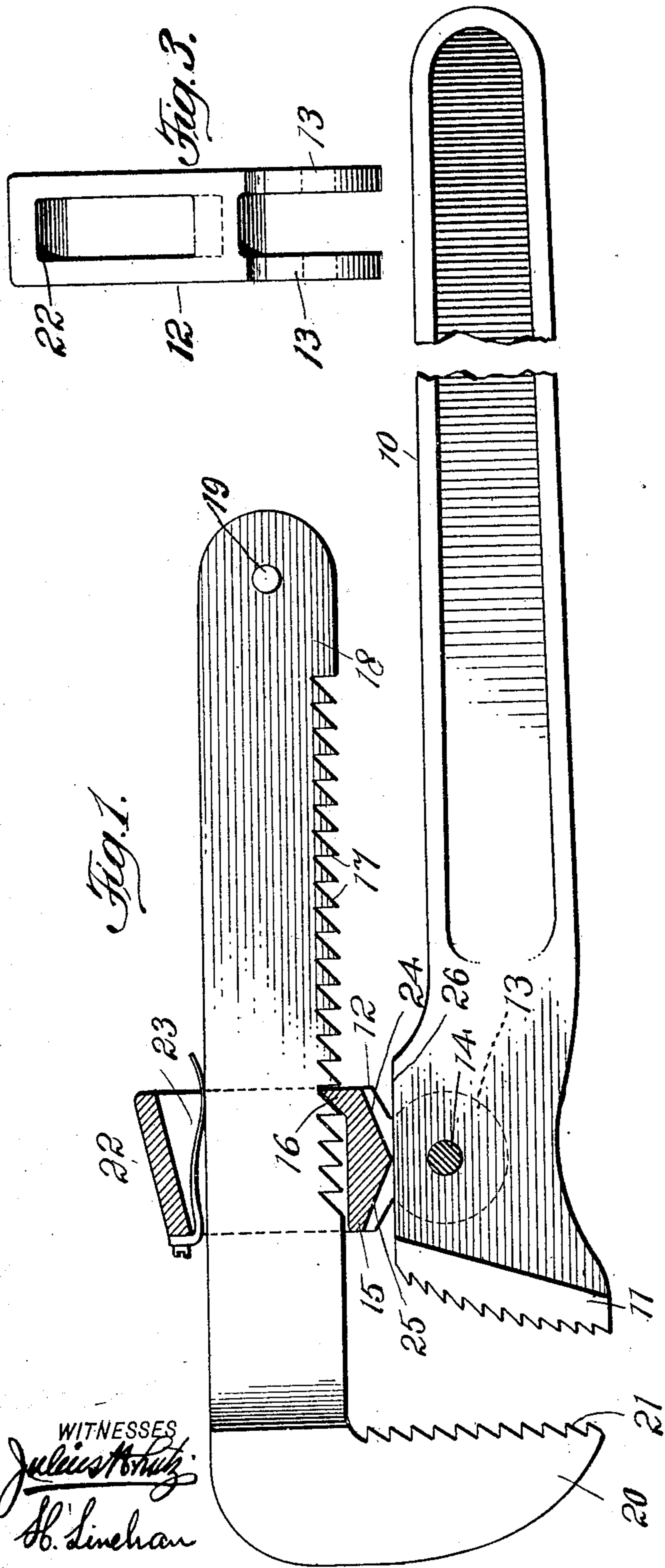
E. OHLSSON.

WRENCH.

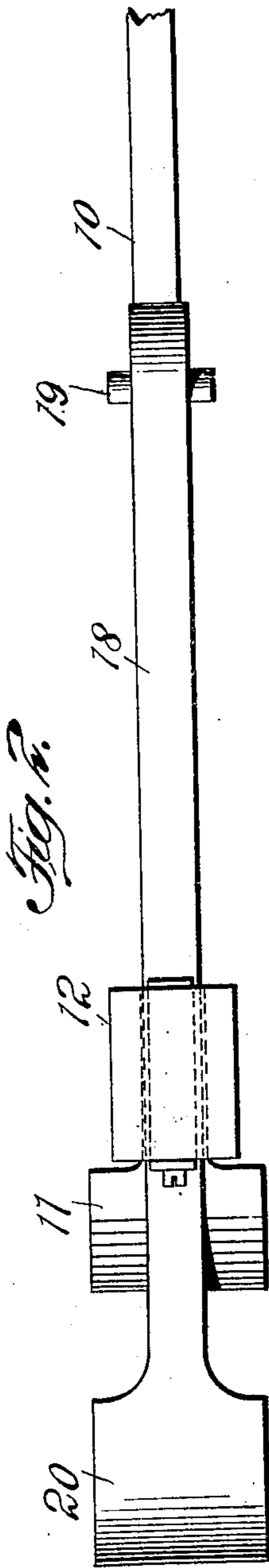
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913,302.

Patented Feb. 23, 1909.



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WRENCH.

No. 913,302.

Specification of Letters Patent.

Patented Feb. 23, 1909.

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To all whom it may concern:

Be it known that I, ELOF OHLSSON, a subject of the King of Sweden, and a resident of New York, county and State of New York, have invented certain new and useful Improvements in Wrenches, of which the following is a full, clear, and exact description.

This invention relates more particularly to a wrench for pipes and other round objects, and the primary object thereof is to provide a simple, effective, and strong device, which may be quickly adjusted to fit the objects of different diameters without the use of a nut or screw, and which once adjusted will positively hold the object to be moved in such a way that the movable parts of the wrench will be subjected to a minimum amount of strain.

A further object of the invention is to provide a wrench which may be cheaply manufactured, and which may be used for various purposes.

With these and other objects in view, the invention will be hereinafter more particularly described with reference to the accompanying drawings, which form a part of this specification, and will then be pointed out in the claims at the end of the description.

In the drawings, Figure 1 is a vertical section, partly in elevation, of one form of wrench embodying my invention. Fig. 2 is a fragmentary plan view; and Fig. 3 is a detail end view of the rocking member and guide for the movable jaw.

The handle 10 may be of any suitable construction, and may be provided at its outer or forward end with the usual fixed jaw 11 which has a serrated edge for gripping the body to be operated on. A rocking member 12 has a yoke portion 13 in the form of two brackets, which are adapted to span the body portion of the handle member 10, and is pivotally held to said member by a bolt 14. The rocking member 12 has a dog 15 formed integral therewith, or fixed between the side portions of the rocking member, and said dog has one or more teeth 16, which is adapted to engage teeth 17 on the inner face of the movable member 18. This member 18 is slidingly held in an elongated opening in the rocking member 12, and has a bolt or pin 19 at one end thereof to limit the outward movement of said member and prevent it from being entirely released from the rocking member, and on the forward or

outer end of said member is the usual movable jaw 20, which may be formed integral with said member, and which may have the usual gripping teeth 21, so that the pipe or other body may be rigidly and properly held between the two jaws. The opening through which the member 18 passes lies in the same plane as the handle member and is extended somewhat above the movable member 18, and said opening is closed by an inclined part 22. Secured to the part 22 is a spring 23, which has one end projecting within the elongated opening to engage the upper surface of the member 18, and said spring normally forces said member toward the handle member 10, so as to cause the teeth 17 to engage the dog 15, thereby preventing further lengthwise adjustment of the movable member. It will be seen that the member 18 may be released from the dog by simply raising the inner end of said member against the pressure of the spring 23, so as to release the dog 15 from the teeth 17, at which time the jaw of said movable member may be quickly adjusted, either toward or away from the jaw of the handle member.

To assist in strengthening the wrench to take the strain, in a measure, from the pivot of the rocking member, I provide inclined sides or surfaces 24 and 25 formed as a part of the dog 15, or they may be independent thereof and carried by the rocking member. As the object is gripped by the jaws, the rocking member will swing on its pivot, and either surface 24 and 25 will rest upon the inner edge 26 of the handle member according to which direction the wrench is operated, thereby causing the strain to be shifted from the pivot to the body of the rocking member and the handle 10.

The wrench is shown in a position ready for adjustment, and by lifting the member 18 so that it may be disengaged from the tooth of the dog 15, the said member may be adjusted to the size of the object to be operated on, and as soon as released the spring 23 will again force it into engagement with the dog. As the handle is operated the fixed jaw will cause the member 12 to rock on its pivot and cause either surface 24 or 25 to rest upon the upper edge 26 of the handle member 10, so as to properly distribute the strain and prevent further movement of one jaw relatively to that of the other.

From the foregoing it will be readily seen

that a simple and efficient wrench is provided, which is adapted to have the movable jaw quickly and readily adjusted with respect to the fixed jaw without interfering in any way with other parts of the wrench and without employing the usual screw or nut; that the wrench may be cheaply made and assembled; and that in case of injury the injured part may be readily replaced without affecting the other parts of the wrench.

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

1. A wrench comprising a handle member having a fixed jaw, a rocking member pivoted to the handle member adjacent to the fixed jaw, a dog carried by the rocking member and having angularly disposed inner surfaces adapted to engage the inner edge of the handle member, a movable member having a jaw at one end slidably held in the rocking member and provided with teeth adapted to be engaged by the dog, and a spring carried by the rocking member and normally forcing the movable member inward so as to be engaged by the dog.

2. A pipe wrench comprising a handle member having a fixed jaw at one end thereof, a rocking member provided with brackets which span the handle member adjacent to the fixed jaw, a bolt for pivotally holding the rocking member to the handle member, said rocking member being provided with an elongated opening in the plane of the handle member, a movable member slidably held in the opening of the rocking member and provided with teeth on its inner edge, a spring having its end projecting within the opening of the rocking member and normally forcing the movable member toward the handle member, a dog having a single tooth normally engaging the teeth of the movable member and having its under surface inclined at an angle so as to extend in opposite directions and adapted to engage and rest upon the inner edge of the handle member, said movable member being adapted to be disengaged from the dog by movement against the pressure exerted by the spring, and a pin carried by one end of the movable member and adapted to engage the rocking member to limit the outward movement of the movable member.

3. A pipe wrench comprising a handle member having a fixed jaw at one end thereof, a rocking member pivoted to the handle adjacent to the fixed jaw, said rocking member being provided with an elongated opening in the plane of the handle member, a movable member slidably held in the opening of the rocking member and provided with teeth on its inner edge, a spring having a free end projecting within

the opening of the rocking member and normally forcing the movable member toward the handle member, a dog normally engaging the teeth of the movable member and having its under surface inclined at an angle so as to extend in opposite directions and adapted to engage and rest upon the inner edge of the handle member.

4. A wrench comprising a handle member having a fixed jaw at one end thereof, a rocking member pivoted to the handle adjacent to the fixed jaw, said rocking member being provided with an opening in the plane of the handle member, a movable member slidably held in the opening of the rocking member and provided with teeth on its inner edge, a spring having one end projecting within the opening of the rocking member and normally forcing the movable member toward the handle member, a dog having a tooth normally engaging the teeth of the movable member and having its under surface inclined at an angle so as to extend in opposite directions and adapted to engage and rest upon the inner edge of the handle member, said movable member being adapted to be disengaged from the dog by movement against the pressure exerted by the spring, and means carried by one end of the movable member adapted to engage the rocking member to limit the outward movement of said movable member.

5. A pipe wrench comprising a handle member having a fixed jaw at one end thereof, a rocking member provided with side brackets which span the handle adjacent to the fixed jaw, a bolt for pivotally holding the rocking member to the handle member, said rocking member being provided with an elongated opening in the plane of the handle member, a movable member slidably held in the opening of the rocking member and provided with teeth on its inner edge, a spring held to the rocking member and having one end projecting within the opening of said rocking member and normally forcing the movable member toward the handle member, and a dog having a single tooth normally engaging the teeth of the movable member and having its under surface inclined at an angle so as to extend in opposite directions and adapted to engage and rest upon the inner edge of the handle member, said movable member being adapted to be disengaged from the dog by movement against the pressure exerted by the spring.

This specification signed and witnessed this 26th day of October A. D. 1907.

ELOF OHLSSON.

Witnesses:

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