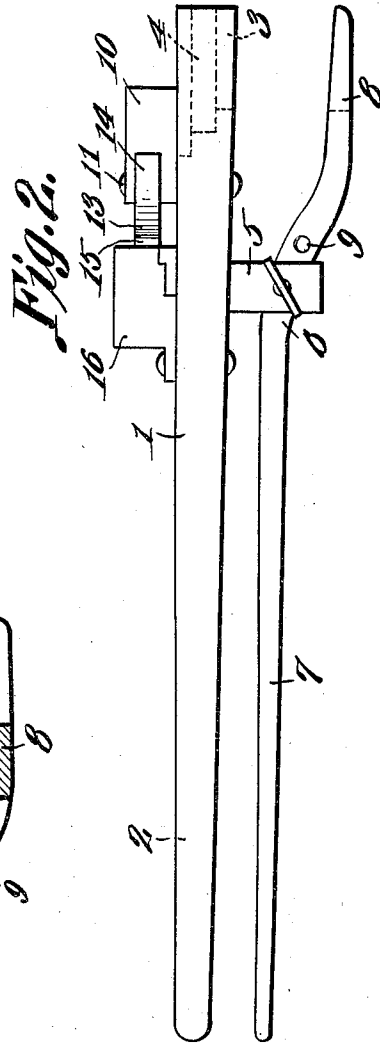
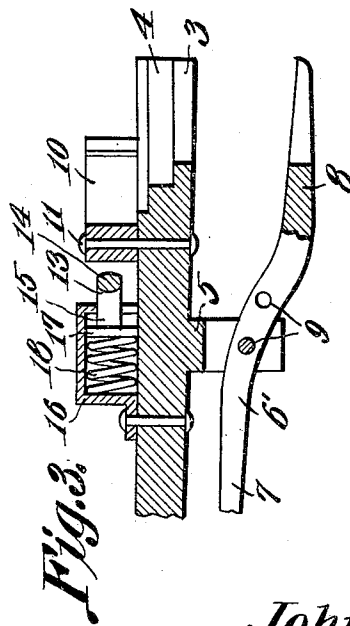
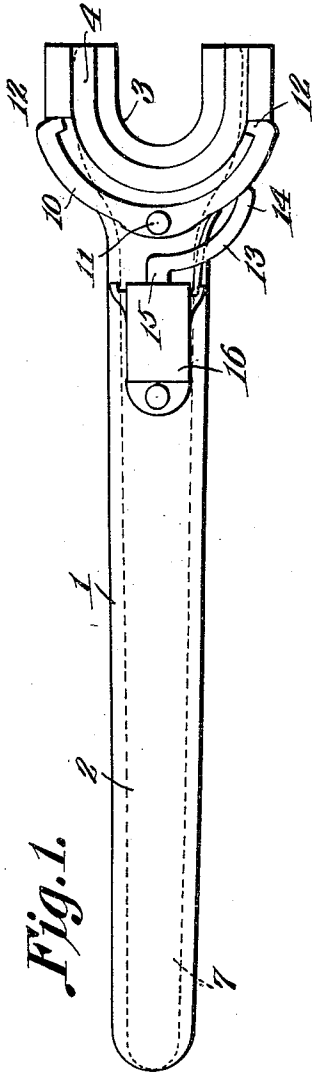


J. H. FESLER.
 PACKING WRENCH.
 APPLICATION FILED MAR. 19, 1913.

1,065,437.

Patented June 24, 1913.



Witnesses

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JOHN H. FESLER, OF NEODESHA, KANSAS.

PACKING-WRENCH.

1,065,437.

Specification of Letters Patent.

Patented June 24, 1913.

Application filed March 19, 1913. Serial No. 755,505.

To all whom it may concern:

Be it known that I, JOHN H. FESLER, a citizen of the United States, residing at Neodesha, in the county of Wilson and State of Kansas, have invented a new and useful Packing-Wrench, of which the following is a specification.

This invention relates to a packing wrench.

10 An object of the present invention is to provide a packing wrench particularly designed to be used in connection with air pumps such as are used in connection with locomotives.

15 A further object is to provide means whereby the main and locking nuts may be secured in place.

20 A further object is to provide an improved form of packing wrench whereby a plier-like action is utilized to force the packing within the packing chamber and to facilitate the engaging and tightening of the packing nut.

25 With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that 30 changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

35 In the drawings accompanying this specification and forming a part thereof, the preferable form of my invention is illustrated, in which:—

40 Figure 1 is a plan view of my improved wrench. Fig. 2 is a side view in elevation thereof. Fig. 3 is a fragmental sectional view illustrating the pawl construction.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 45 designates a member which comprises a handle 2 at one end thereof and the end remote therefrom is enlarged and provided with an aperture 3 therein, there being a number of stepped portions 4 parallel to the side walls of the said aperture 3. The purpose of the aperture 3 being stepped is to 50 so form the wrench that it may accommodate circular nuts of varying diameters, it being understood in this connection that my improved form of wrench is especially 55 adapted to grip the packing nut of an air

pump, the usual form of the said nut being circular and provided with a number of notches therearound which are adapted to be engaged by a spanner wrench.

60 Secured to the member 1 is the outwardly projecting lug 5 the outer extremity of which is bifurcated or slotted and the member 6 pivotally secured therein. The inner portion of the member 6 comprises or forms an actuating handle 7 and the outer portion 65 8 of said member is enlarged and provided with an aperture or bifurcation as more clearly shown in dotted lines in Fig. 1. The said member 6 is provided with a plurality of openings 9 which are adapted to be pivotally engaged and supported within the slot- 70 ted member 5. It is to be understood that the wrench may be used with air pumps of varying sizes or may be used to install packings within packing glands under varying 75 circumstances. In order to provide means whereby the nut may be engaged a double dog 10 is pivotally secured as at 11 to the member 1. The said double dog is provided 80 with the radially projecting arms at the extremities of which are formed the inwardly projecting lugs 12—12, there being one of each of these lugs adapted to position upon opposite sides of the nut so that the same 85 may be rotated to loosen or fasten the same. In order that the dog may be held resiliently against the side of the nut prior to the insertion of the lugs 12 into the notches which are formed in the sides of 90 the said nut, a suitable pawl 13 is provided and comprises an arm 14 to the inner extremity of which is formed integral a shaft 15, which shaft extends within a casing 16 95 which is secured upon the surface of the member 1, as illustrated in the drawings. To the rear portion of the shaft 15 is secured an enlarged head 17 behind which is spaced a helical spring 18 which tends to always 100 hold the said latch 13 against one of the arms of the dog 10. The arm 14 is adapted to rotate with the shaft 15 as an axis in order to engage either one of the arms of the dog 10 from which it will be apparent that 105 when it is desired to loosen the nut the pawl will be placed upon one of the arms of the dog and upon the other when the nut is to be tightened.

In the practical use of my device the packing is first inserted in the packing 110 glands and my improved form of wrench brought to bear upon the packing nut and

the handles 2 and 7 firmly gripped and drawn together with the result that the portion 4 of one member and the portion 8 of the other will be forced apart and the portion 8 will come in contact with a suitable abutment which in the case of an air pump cylinder will be the opposite packing nut from the one which is about to be tightened and the packing nut will be suitably engaged within the stepped portion 4 of the member 1, it being understood that the aperture 3 provides for the suitable accommodation of the pump piston rod. One arm of the dog 10 will then be forced into engagement with a notch formed in the face of the nut as is the usual construction and will engage the same the wrench acting therefore in the capacity of what is known as a spanner wrench and may suitably tighten the nut to thereby exert a pressure upon the packing material. It is noted that in the practical packing of a gland, the gland is first filled with the packing and an excess amount of packing placed upon the outside thereof and by means of the wrench such as I have herein disclosed, the said excess packing is forced within the gland and the nut securely tightened thereagainst. By my improved wrench it will be apparent that a nut may be turned in either direction and that improved means have been provided for the engaging of the same.

Having thus fully described the invention, what I claim to be new and original with me is:—

1. A wrench comprising a member with a handle and an enlarged bifurcated end, a second member comprising a handle and a bifurcated end pivotally secured thereto and spaced therefrom, a dog pivotally secured to the first mentioned member and provided with outstanding arms, means at the extremities of said arms for engaging notches.

2. A wrench comprising a member with a handle and an enlarged bifurcated end, a second member with a handle and a bifurcated end pivotally secured thereto and spaced a distance therefrom, a dog pivotally secured to the first member, and resilient means for holding one arm thereof in engagement with a nut.

3. A wrench comprising a member with

a handle and an enlarged bifurcated end, said bifurcated end provided with a number of steps to engage nuts of varying sizes, a second member comprising a handle and an enlarged bifurcated end pivotally secured to the first mentioned member and spaced a distance therefrom, a dog pivotally secured to the first mentioned member and adapted to extend across the stepped portion thereof, resilient means contacting with said dog.

4. A wrench comprising a member with a handle and an enlarged bifurcated stepped end, a second member pivotally secured to the first mentioned member and spaced a distance therefrom, a dog provided with two outstanding arms pivotally secured to the first mentioned member and said arms provided at their lower extremities with inwardly extending lugs adapted to engage notches formed in the sides of a nut, a pawl member contacting with one of the arms of the said dog and adapted to hold the same in engagement with a nut, said pawl extending within a casing secured to the first mentioned member and rotatably held thereby.

5. A packing wrench comprising a member with a handle and an enlarged bifurcated stepped end, a second member comprising a handle and an enlarged bifurcated end pivotally secured to the first mentioned member and spaced a distance therefrom, said second member provided with a plurality of openings whereby the same is adjustably secured to the first mentioned member, a dog pivotally secured to the first mentioned member and adapted to extend within the stepped portion of said end, a pawl contacting with one of the arms of said dog and adapted to hold the same in engagement with a notch in a nut, said pawl provided with a shaft extending therefrom, a casing rotatably engaging said shaft, and resilient means disposed within said casing adapted to hold said pawl in contact with the said dog.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN H. FESLER.

Witnesses:

A. L. STRONG,
B. H. HILL.