Oct. 21, 1924. 1,512,559

C. J. MOORE

ADJUSTABLE JAW WRENCH

Filed Jan. 7, 1924

Fig. 1.

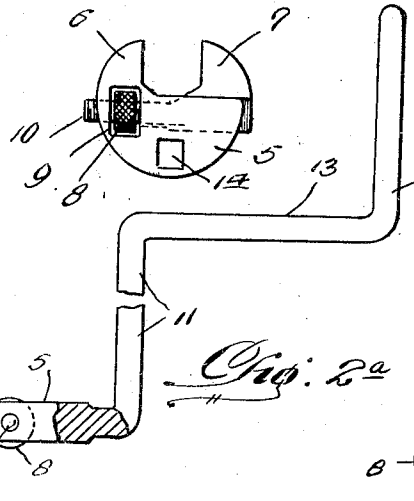


Fig. 2a

Fig. 2.

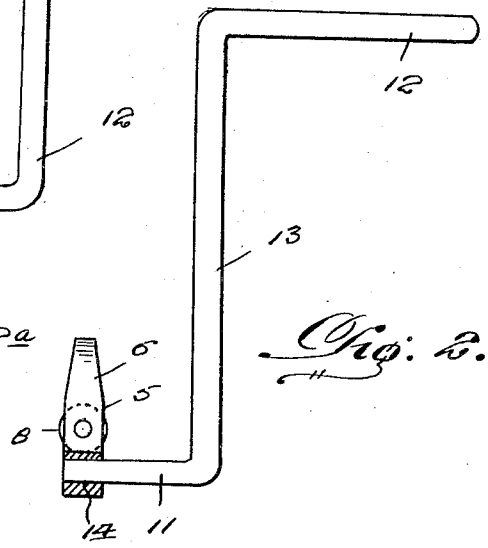


Fig. 3.

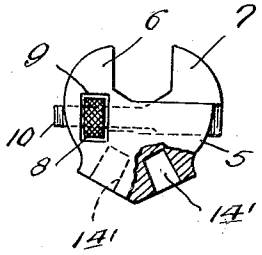


Fig. 4.

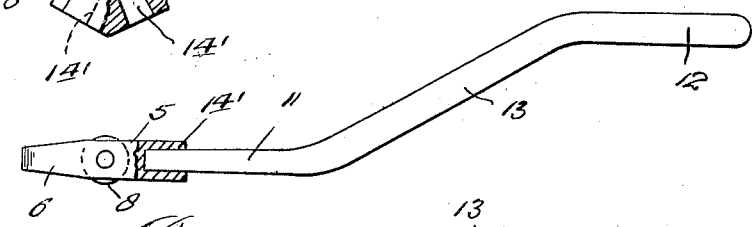
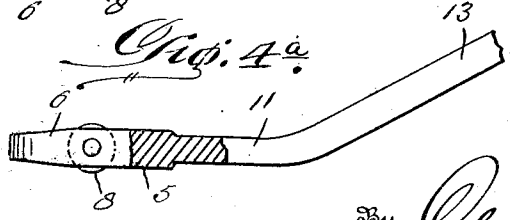


Fig. 4a.



C. J. Moore,
Inventor

By Clarence O'Brien.
Attorney

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UNITED STATES PATENT OFFICE.

CHESTER J. MOORE, OF ERIE, PENNSYLVANIA.

ADJUSTABLE JAW WRENCH.

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To all whom it may concern:

Be it known that I, CHESTER J. MOORE, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Adjustable Jaw Wrenches, of which the following is a specification.

This invention relates to certain new and useful improvements in adjustable jaw wrenches and has particular reference to a wrench of this character so constructed and having a handle so formed as to permit ready turning of nuts located in inaccessible places and through which bolts may extend for such an undue or unusual distance as to prevent manipulation or turning of the nut through the medium of conventional socket wrenches.

An object of the invention is to provide a wrench of the above kind which is simple and durable in construction so as to be manufactured and marketed at a relatively low cost and which may be easily and readily manipulated to overcome the above noted objection to socket wrenches.

Still another object of the invention is to provide an adjustable wrench including a wrench head having a rigid and an adjustable sliding jaw at one end and provided with a socket at its other end for removable reception of socket wrench handles of angular form, whereby the wrench may be employed for turning nuts located in inaccessible places or for turning nuts thru which the bolts extend for an unusual distance.

Other objects will appear as the nature of the invention is better understood and the same consist in the novel form, combination, and arrangement of parts hereinafter more fully described, shown in the accompanying drawing and claimed.

In the drawing, wherein like reference characters indicate corresponding parts throughout the several views:

Figure 1 is a top plan view of a wrench head constructed in accordance with the present invention.

Fig. 2 is a view partly in side elevation and partly in section of the wrench head shown in Fig. 1, with a socket wrench handle of special form operatively engaged therewith.

Fig. 2ª is a view partly in section and partly in side elevation of a wrench and handle somewhat similar to that shown in Fig. 2 but wherein the handle and wrench head are integral.

Fig. 3 is a view similar to Fig. 1, but partly in section, illustrating a modified form of wrench head constructed in accordance with the present invention.

Fig. 4 is a view similar to Fig. 2 showing the wrench head illustrated in Fig. 3 with a special form of handle applied thereto; and

Figure 4ª is a view somewhat similar to Fig. 4 illustrating a wrench head provided with an integral handle similar to the handle illustrated in Fig. 4.

Referring more in detail to the drawings, the present invention embodies a wrench head 5 formed at one end and adjacent one side with an integral or rigid jaw 6, an adjustable slidable jaw 7 being carried at this end of the wrench head 5 for movement transversely of the latter toward and away from the rigid jaw 6 and any suitable means such as a nut 8 confined in an opening 9 of the jaw head 5 and threaded upon a threaded stem 10 rigid with the adjustable jaw 7 being provided for adjusting the latter jaw toward and away from the rigid jaw 6. The wrench also embodies a handle member projecting from the opposite end of the wrench head 5 and rigidly associated with the latter, which handle embodies parallel oppositely directed end portions 11 and 12 that are offset relative to each other and connected by a lateral intermediate portion 13. As shown in Figs. 2 and 2ª the intermediate portion 13 may be extended at right angles to the end portions 11 and 12 of the handle so as to substantially form a crank for causing rotation of the nut held between the jaws 6 and 7 of the wrench head, which jaws are parallel with the intermediate portion 13 of the handle. However, as shown in Figs. 4 and 4ª the intermediate portion 13 of the handle may be disposed at an obtuse angle to the end portions 11 and 12 of the handle so that the outer end portion or hand-grip portion 12 of the handle is located parallel with the plane of the wrench head but in a plane spaced from that of the wrench head and the inner end of the handle so that turning of nuts located in inaccessible places may be effected. Also, in the forms of the invention shown in Figs. 4 and 4ª the end portions of the handle are parallel with the

plane of the wrench head and the handle projects rearwardly from the rear edge of the wrench head.

In the forms of the invention shown in Figures 1 and 2, the rear end of the wrench head 5 is provided with a central transverse socket or opening 14 of polygonal form for snug reception of the inner end of the wrench handle so that wrench handles of various forms may be interchangeably employed, while in the form of the invention shown in Figure 2ª the handle is formed integral with the wrench head and extends laterally from the latter centrally of its rear end portion.

In the form of the invention shown in Figures 3 and 4, the wrench head 5 is provided with one or more substantially longitudinally extending sockets 14′ that open through the rear end of the wrench head and are adapted for snug removable reception of the inner end of a wrench handle as shown in Fig. 4, so that the inner end portion of the handle, indicated by the reference character 11 will be co-extensive with the wrench head. As shown in Fig. 4ª the form of handle employed in Fig. 4, may be integrally formed with the wrench head 5 so that the inner end portion 11 of the handle is co-extensive with the wrench head. The advantage of the construction shown in Fig. 4 consists in the ability to interchangeably employ wrench handles of slightly differing forms, tho embodying the general characteristics set forth above. When a pair of sockets 14′ are provided in the inner end of the wrench head as shown in Fig. 3, the handle may be associated with the wrench head so as to be disposed to extend in either direction at an angle to the longitudinal axis of the wrench head, thereby permitting most effective operation under particular circumstances or conditions.

From the foregoing description, it is believed that the construction and operation as well as the advantages of the present invention will be readily understood and appreciated by those skilled in the art.

What I claim as new is:

In an adjustable jaw wrench of the character described, a flat wrench head having a rigid jaw upon its outer end and adjacent one side of the same, and provided with a transversely slidable adjustable jaw upon its outer end in coooperative relation to the rigid jaw, means for manually adjusting said adjustable slidable jaw, a handle adapted for rigid association and attachment to the wrench head at the rear end of the latter, said handle comprising parallel end portions connected by a laterally extending intermediate portion, said wrench head having a pair of sockets in the inner end thereof, said sockets extending substantially longitudinally of the wrench head but at rearwardly diverging relation to each other and adapted for selective snug reception of the inner end of the handle.

In testimony whereof I affix my signature.

CHESTER J. MOORE.