

R. E. JACK.
CLAMPING TOOL.
APPLICATION FILED MAR. 7, 1910.

986,464.

Patented Mar. 14, 1911.

Fig. 1.

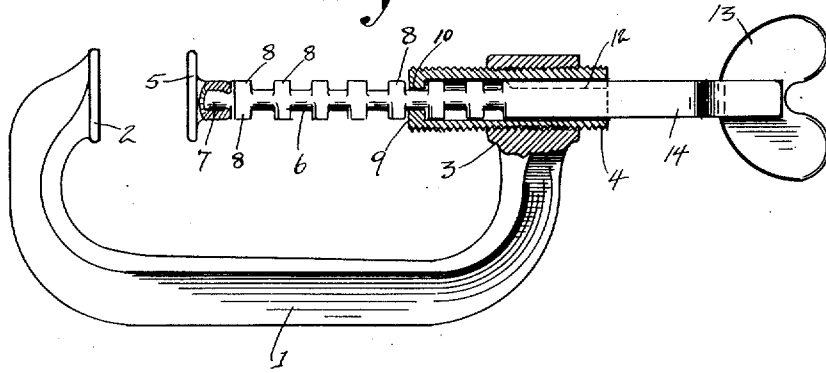


Fig. 2. Fig. 3. Fig. 4.

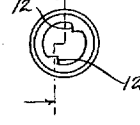
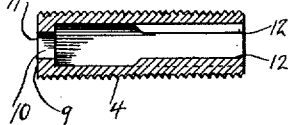
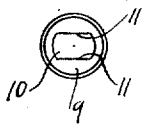


Fig. 5.



Witnesses

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CLAMPING-TOOL.

986,464.

Specification of Letters Patent.

Patented Mar. 14, 1911.

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To all whom it may concern:

Be it known that I, ROBERT E. JACK, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Clamping-Tools, of which the following is a specification.

My invention relates to improvements in clamping tools and it pertains more especially, among other things, to the construction of the device for quickly adjusting the movable clamping member of the clamp nearer to or farther from the stationary member preparatory to applying the action of a screw to said movable clamping members, whereby said clamping members may be quickly brought against the opposing surfaces of the object to be clamped preparatory to applying such screw pressure thereto.

My invention is further explained by reference to the accompanying drawings, in which—

Figure 1 represents a side view thereof, part in section. Fig. 2 is an end view of one end of the screw threaded sleeve. Fig. 3 is a longitudinal section of the screw threaded sleeve. Fig. 4 is an end view from the opposite end of the screw threaded sleeve from that shown in Fig. 2, and Fig. 5 is a transverse section of the slidable adjustable rod of the movable clamping member.

Like parts are identified by the same reference numerals throughout the several views.

My clamp comprises, among other things, the rigid yoke 1 provided at one end with a fixed clamping member 2 and at its opposite end with a stationary screw threaded sleeve 3 for the reception of the revoluble screw threaded sleeve 4.

5 is a movable clamping member, which is connected with one end of the slidable member 6 through an ordinary ball and socket joint 7. The slidable member 6 is provided with a plurality of radial lugs 8 extending from opposite sides thereof and said lugs are respectively adapted to bear against the end member 9 of the revoluble sleeve 4. The end member 9 is provided with an elongated slot 10 for the passage of the radial lugs 8, whereby when the slidable member 6 is turned so as to bring said radial lugs 8 in alinement with said aperture 10, said slidable member 6 may be

freely moved in either direction through the sleeve 4. Thus it is obvious that when desirous to apply the clamping tool to an object, the stationary bearing member 2 is placed upon one side thereof, when the slidable member 6 is moved until the opposing clamping member 5 is brought in contact with the opposite side of said object. When this is done, the slidable member 2 is revolved together with the screw threaded sleeve 4, whereby great pressure may be applied to said object through the action of said screw threaded sleeve 4 in the screw threaded sleeve 3, while said slidable member 6 is prevented from moving back in said revoluble sleeve 4 by contact of said radial lugs 8 with the opposing sides 11, 11, of said end member. The revoluble sleeve 4 is provided on its two opposing sides with inwardly projecting beads 12, 12, against which the radial lugs 8 of the slidable member 6 are adapted to contact, and the slidable member 6 is revolved, whereby a revoluble movement is communicated from said slidable member 6 to said sleeve as said slidable member is turned.

13 is an operating handle, by which the slidable member 6, together with the sleeve 4, are revolved in their supporting bearings. Thus it will be understood that the clamping members 2 and 5 are adjusted nearer to and farther from each other against the object to be clamped, by the movement of said slidable member 6; that when said clamping members are thus adjusted and the handle 13 is revolved, said clamping member 5 will be moved forwardly and will be caused to bear with great pressure against the object to be clamped. The shank 14 of the slidable member 6 is of such width as to bear at its opposing edges against the opposing walls of the sleeve 4, whereby when the radial lugs 8 have been moved forward out of contact with the beads 12, the opposing edges of said shank 14 are adapted as the slidable member is revolved, to contact with said inwardly projecting beads 12 and thereby cause said sleeve 4 to revolve in the stationary sleeve 3.

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

1. In a clamping tool of the described class, the combination of an integrally formed yoke provided at one end with a

stationary clamping member and at its opposite end with a screw threaded sleeve, an open revoluble sleeve having screw threaded bearings in said stationary sleeve and provided at one end only with inwardly extending contact bearings, a slidable member supported within said sleeve and provided with a series of radial lugs adapted to bear against the outer end of said revoluble sleeve, and means connected with said slidable member for revolving the threaded sleeve in said stationary sleeve.

2. In a clamping tool of the described class, the combination of an integrally formed yoke provided at one end with a stationary clamping member and at its opposite end with a screw threaded sleeve, an open revoluble sleeve having screw threaded bearings in said stationary sleeve and provided at one end only with inwardly extend-

ing contact bearings, and near its opposite end with longitudinally arranged inwardly extending beads, a slidable member supported within said sleeve and provided at one end with a clamping member revolubly connected therewith, at its opposite end with an operating handle, and upon its respective sides with a series of radial lugs, said lugs being adapted to bear against the outer end of said revoluble sleeve, the radial lugs of said slidable members being adapted as the latter is turned, to contact with said longitudinal beads and turn said sleeve in its threaded bearings.

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

ROBERT E. JACK.

Witnesses:

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