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1,508,044

J. W. BATE

JACK

Filed Jan. 25, 1922

Fig. 1.

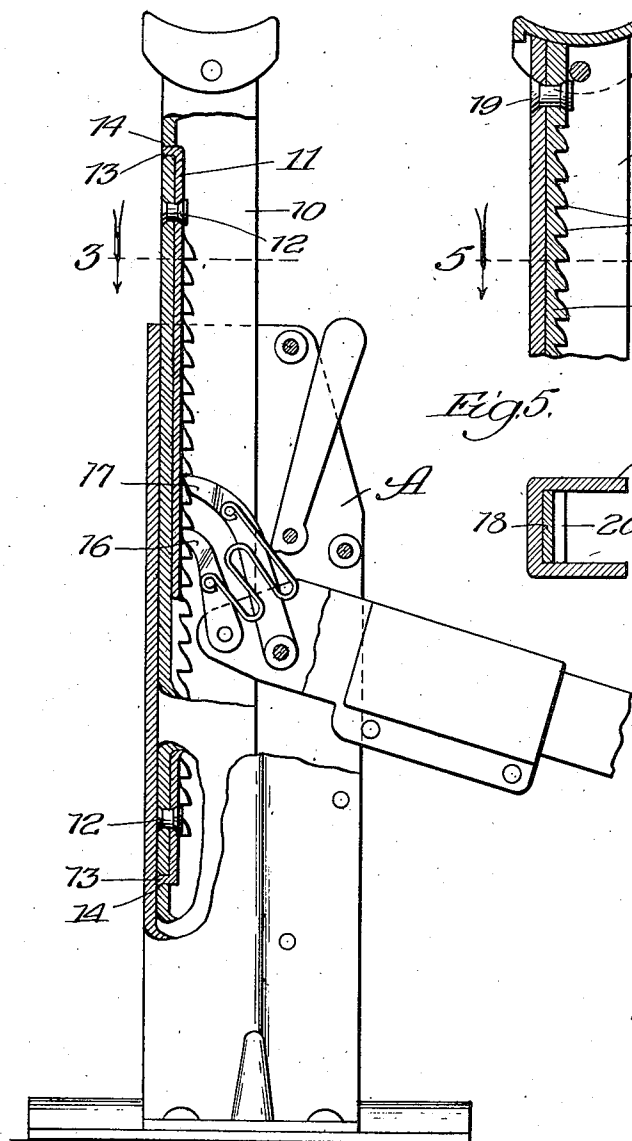


Fig. 4.

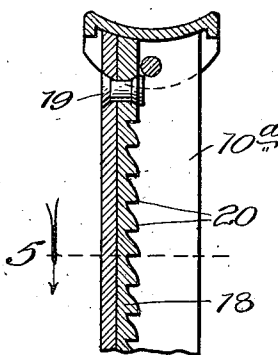


Fig. 2.

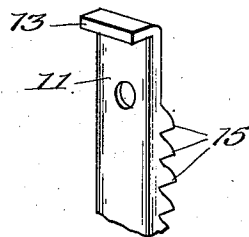


Fig. 5.

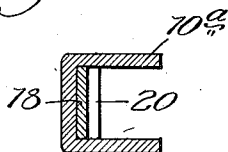


Fig. 3.

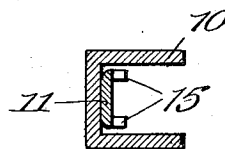
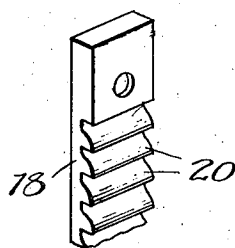


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN W. BATE, OF RACINE, WISCONSIN.

JACK.

Application filed January 25, 1922. Serial No. 531,700.

To all whom it may concern:

Be it known that I, JOHN W. BATE, a citizen of the United States, residing at Racine, in the county of Racine and State of Wisconsin, have invented a new and useful Improvement in Jacks, of which the following is a specification.

This invention relates to jacks and particularly to the racks used in the lifting member of jacks. The invention is fully described in the following specification and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of the lifting jack showing the lifting member and operating mechanism partly in section.

Fig. 2 is a partial perspective view of the back of the rack shown in Fig. 1.

Fig. 3 is a transverse section on the line 3 of Fig. 1.

Fig. 4 is a partial vertical section through a modified form of lifting member and rack.

Fig. 5 is a transverse section on the line 5 of Fig. 4; and

Fig. 6 is a partial perspective view of the rack shown in Fig. 4.

This jack consists of a casing A in which is slidably mounted a lifting member 10 which is U-shaped in cross-section as shown in Fig. 3. A stamped metal rack 11 is secured in the bottom of the lifting member 10 by means of rivets 12. As an additional fastening means I have also turned the ends 13 of the rack 11 and passed them through openings 14 in the bottom of the U-shaped lifting member. These ends are then riveted over to retain them.

This rack has teeth 15 formed upon its edges and these are turned at right angles to the body of the rack 11 so as to form a shallow U-shaped section as shown in Fig. 3.

A lifting mechanism is carried by the casing A and has pawls 16 and 17 which may be operated in any desirable manner to lift the member 10 in any well known manner.

These pawls engage the teeth 15 which are made appreciably narrower than the inside distance between the flanges of the U-shaped lifting member 10 as is shown in Fig. 3. This permits the pawls to overhang the edges of the rack teeth.

Figs. 4, 5 and 6 show a modified form of lifting member 10^a of U-shape cross-section having a solid rack 18 secured in the bottom thereof by means of rivets 19. This rack may have its teeth 20 cast or milled therein.

While I have shown and described certain embodiments of my invention, it is to be understood that it is capable of many modifications. Changes, therefore, in the construction and arrangement may be made without departing from the spirit and scope of the invention as disclosed in the appended claims, in which it is my intention to claim all novelty inherent in my invention as broadly as possible in view of the prior art.

What I claim as new, and desire to secure by Letters Patent, is:

1. In a jack, a casing, a lifting member slidable therein, said member having a U-shaped cross-section, a rack secured within said member, and lifting mechanism including pawls operable on said rack, said rack comprising a strip of U-shaped cross-section having notched edges, said sections facing in the same direction, there being an appreciable space between the notched edges of the racks and the inner sides of the flanges of the outer section.

2. In a jack, a casing, a lifting member slidable therein, said member having a U-shaped cross-section, a rack secured within said member, lifting mechanism including pawls operable on said rack, said rack comprising a strip of U-shaped cross-section having notched edges, an opening in the bottom of said member and an end on said rack adapted to engage said opening.

JOHN W. BATE.