H. LORENZEN.

JACK.

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1,406,881. Patented Feb. 14, 1922.

Fig. 1.

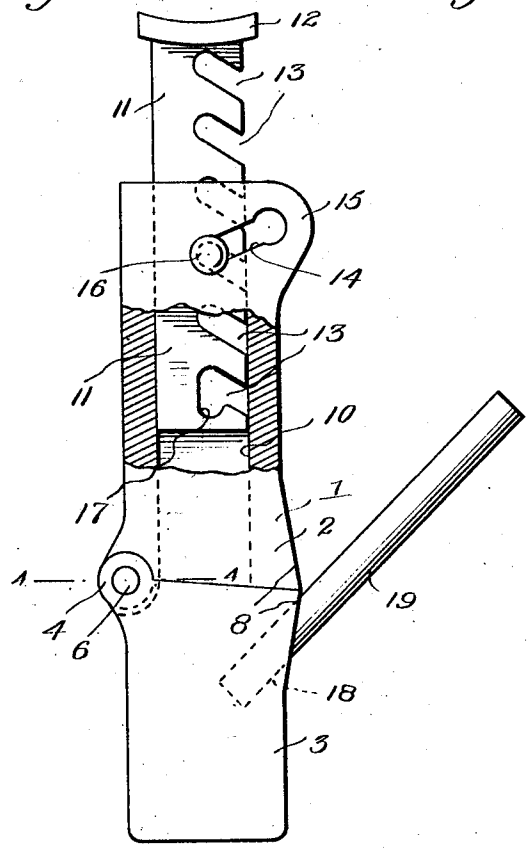


Fig. 2.

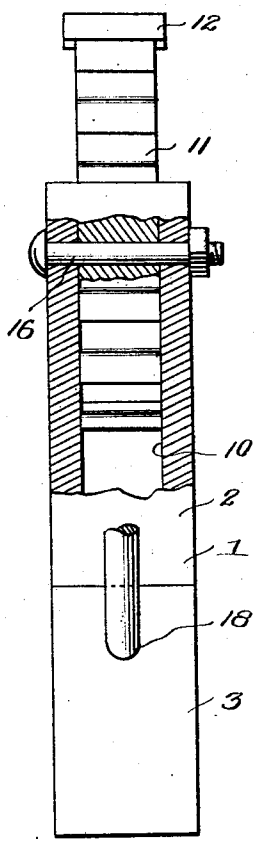


Fig. 3.

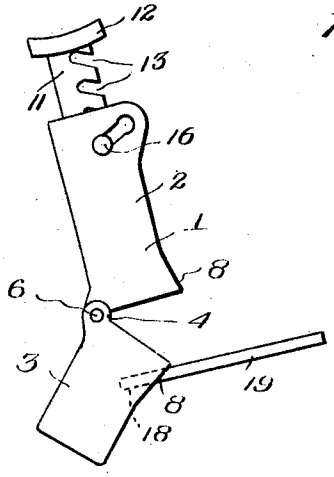
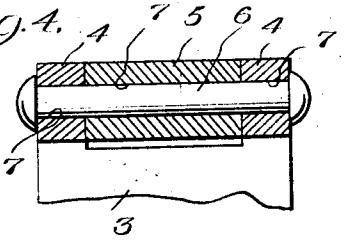


Fig. 4.



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JACK.

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To all whom it may concern:

Be it known that I, HENRY LORENZEN, a citizen of the United States, residing at Crete, in the county of Will and State of Illinois, have invented new and useful Improvements in Jacks, of which the following is a specification.

This invention relates to lift jacks, and an object of the invention is to provide a lifting jack which is simple in construction and one which may be easily and quickly set and operated for raising desired articles.

Another object of this invention is to provide a jack structure, as specified, which includes, a pair of pivotally connected members, one of which adjustably carries an article engaging and supporting member which pivotally or hingedly connected sections are adapted to be moved at an obtuse angle to each other to permit the insertion of the jack beneath the object to be raised and forced into alignment to raise the article and support it in raised position.

Other objects of the invention will appear in the following detailed description and in the accompanying drawings wherein:

Fig. 1 is a side elevation, partly in section of the improved jack showing it in a supporting position.

Fig. 2 is an edge elevation partly in section of the improved jack structure.

Fig. 3 is a reduced side elevation of the jack structure showing it in position to be inserted beneath an article to be raised.

Fig. 4 is a detail cross section taken on the line 4—4 of Fig. 1.

Referring more particularly to the drawing the improved jack structure comprises the main body 1 formed of sections 2 and 3. The base section 3 is provided with spaced barrel ears 4 on its upper end at each side thereof between which barrel ears the hinged barrel 5, which is formed upon the upper section 2, engages. A pivoted pin 6 extends through the aligning openings 7 in the respective barrels 4 and 5 for pivotally or hingedly connecting the section 2 to the base section 3. The meeting ends of the sections 2 and 3 are slightly increased in area by the outward tapering of their sides as shown at 8 so as to provide greater engaging areas between the members to securely support the member 2 upon the base member 3 when in an article supporting position.

The upper section 2 of the jack structure is provided with a longitudinally extending bore 10 which slidably receives therein the article engaging adjustable member 11 which has a seat block 12 upon its upper end shaped to fit against rounded or concave members if necessary to provide firm engagement with the article to be raised. The member 11 is provided with a plurality of longitudinally spaced, upwardly inclining recesses 13 extending inwardly from one of its sides, as clearly shown in Fig. 1 of the drawing, and the body section 2 is provided with aligning slots 14 which incline oppositely to the direction of inclination of the cutout portions 13 and which extend into lateral extensions 15 formed on the upper section 2. A pin or bolt 16 is carried by the upper section 2 and mounted in the slots 14, the said pin being adapted to be seated in any one of the recesses 13 to maintain the member 11 in adjusted position relative to the section 2. The lowermost recess 13 in the member 11 is provided with a downward extension 17 to prevent the adjustable member 11 from being removed from the bore 10 when the last or lowermost recess has been reached.

The base section 3 is provided with a downwardly inclining opening 18 therein which is adapted to receive a handle 19 which arm or handle inclines upwardly as clearly shown in Figs. 1 and 3 of the drawing to provide a leverage whereby the jack may be moved on its hinged connection into operative supporting position as shown in Fig. 1 of the drawing. The handle 19 is adapted to be removed when the jack is in a supporting position.

In use, the hinged joint of the jack is broken to position sections 2 and 3 at obtuse angles one to the other and the member 11 is adjusted until the seat 12 thereon properly engages the member to be raised, after which pressure is applied to the spread edges of the sections 2 and 3 to force them into alignment one with the other and to force their facing surfaces into engagement as shown in Fig. 1 of the drawing which will raise the article engaged by the jack.

The jack may be easily and quickly removed from a supporting position by again breaking the pivoted or hinged joint.

It is, of course, to be understood that the invention may be constructed in various other manners and the parts associated in

different relations, and, therefore, I do not desire to be limited in any manner except as set forth in the claims hereunto appended.

Having thus described my invention what I claim is:

1. In a jack, a base section, an upper section hingedly connected to said base section at one edge, the engaging surfaces of said upper and base sections being enlarged, said upper section provided with a longitudinally extending bore, an article engaging member slidably mounted in said bore, means for holding said article engaging member in adjusted position and a removable handle carried by said base structure and extending at an acute angle to the vertical sides of the base section.

2. In a jack, a base section, an upper section hingedly connected at one edge, to said base section and adapted to have its lower surface lie in facial abutment with the upper surface of the base section, an article engaging member slidably carried by said upper section and provided with a plurality of longitudinally spaced downwardly inclining recesses opening out at one side of the member, said upper section provided with slots extending transversely of said recesses and a pin in said slots and adapted to engage in any one of said recesses to hold said article engaging member in adjusted positions relative to said upper section.

3. In a jack, a base section, an upper section hingedly connected at one edge, to said base section and adapted to have its lower surface lie in facial abutment with the upper surface of the base section, an article engaging member slidably carried by said upper section and provided with a plurality of longitudinally spaced downwardly inclining recesses opening out at one side of the member, said upper section provided with slots extending transversely of said recesses and a pin in said slots extending transversely of said recesses and adapted to engage in any one of said recesses to hold said article engaging member in adjusted position relative to said upper section, and a removable handle carried by said base structure and extending at an acute angle to the sides thereof.

4. In a jack, a base section, an upper section hingedly connected thereto, an article engaging member slidably carried by said upper section and provided with a plurality of longitudinally spaced downwardly inclining recesses opening out at one side of the member, said upper section provided with slots extending transversely of said recesses, and a pin in said slots and adapted to engage in any one of said recesses to hold said article engaging member in adjusted position relative to said upper section.

In testimony whereof I affix my signature.

HENRY LORENZEN.