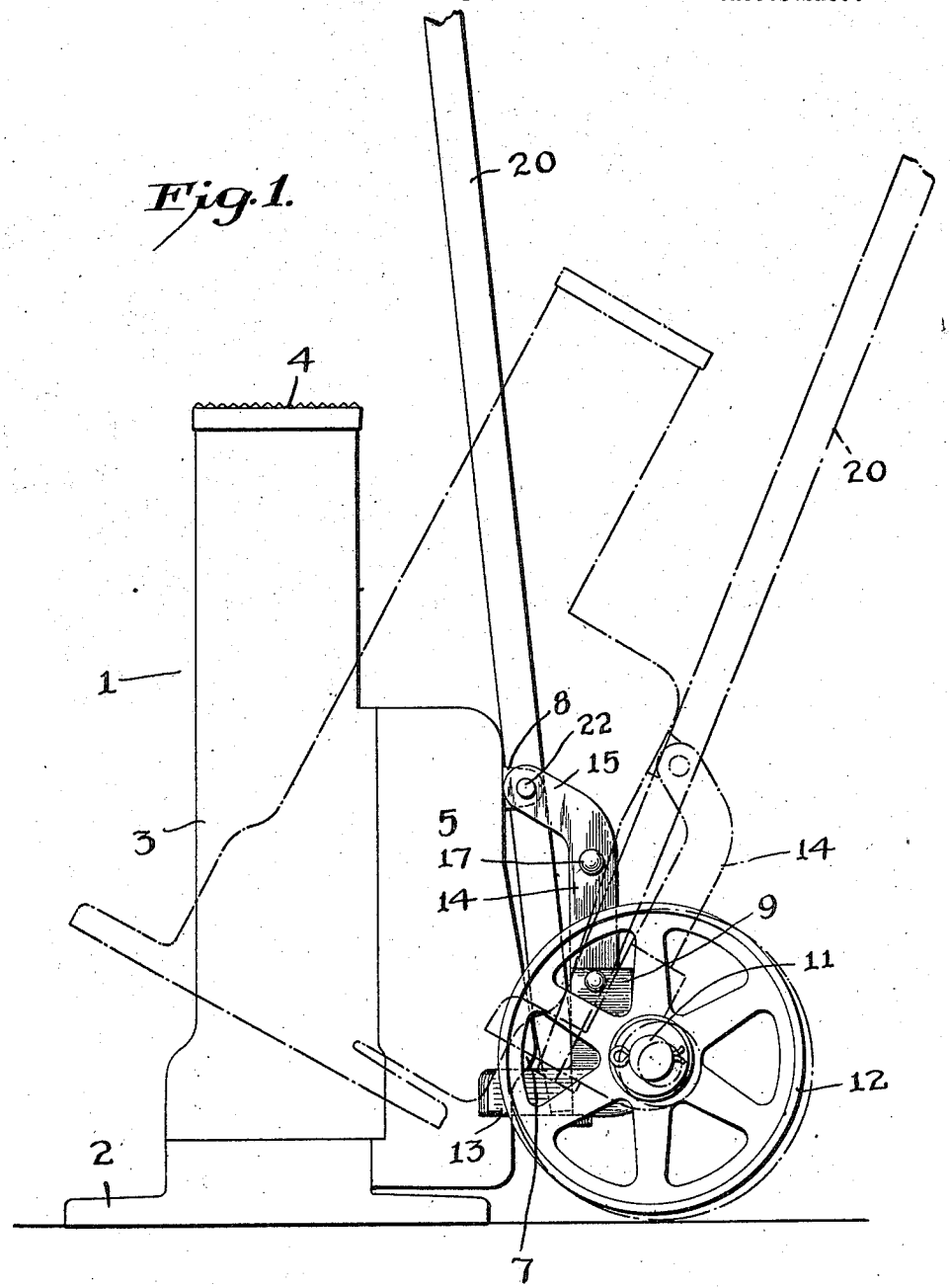
July 17, 1923. 1,461,820

K. ECK

WHEELING ATTACHMENT FOR LIFTING JACKS

Filed Aug. 11, 1920 4 Sheets-Sheet 1

Fig. 1.



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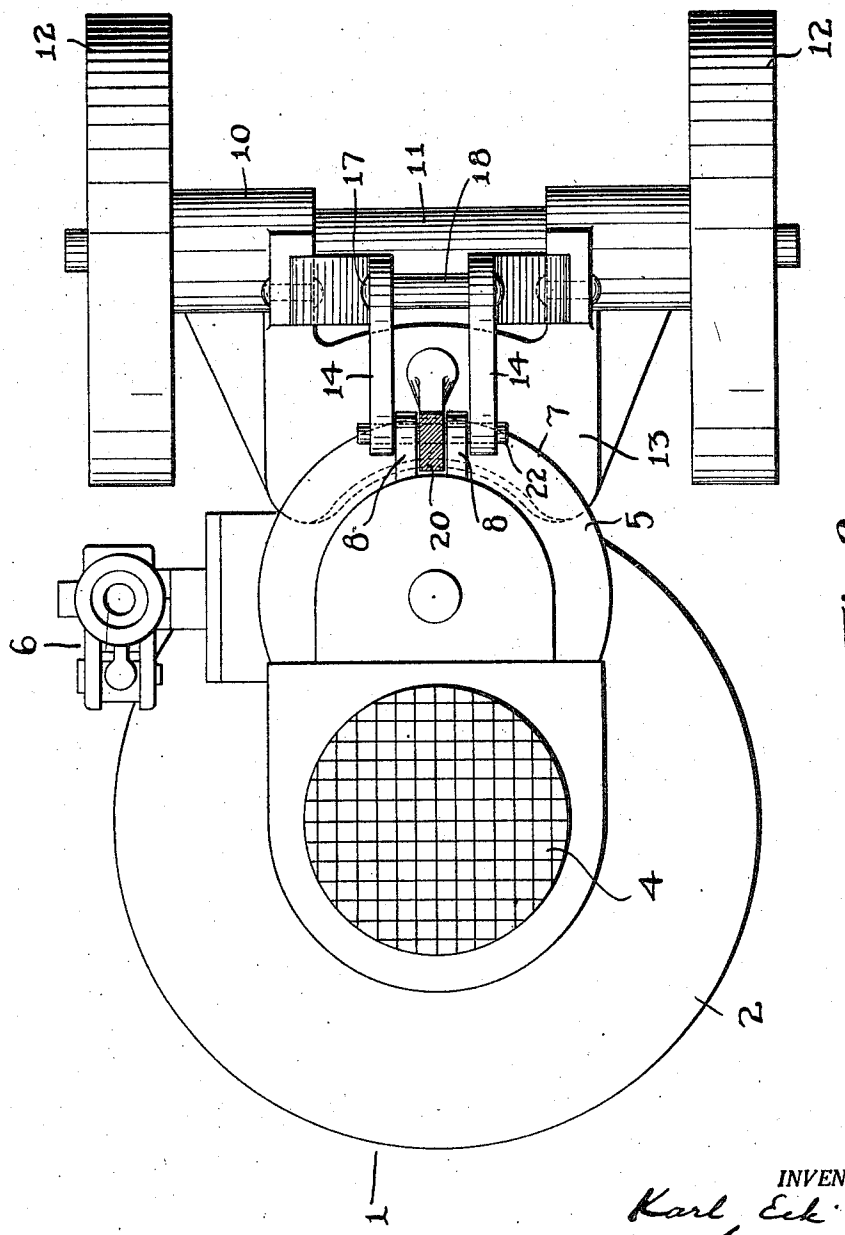


Fig. 2.

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WHEELING ATTACHMENT FOR LIFTING JACKS

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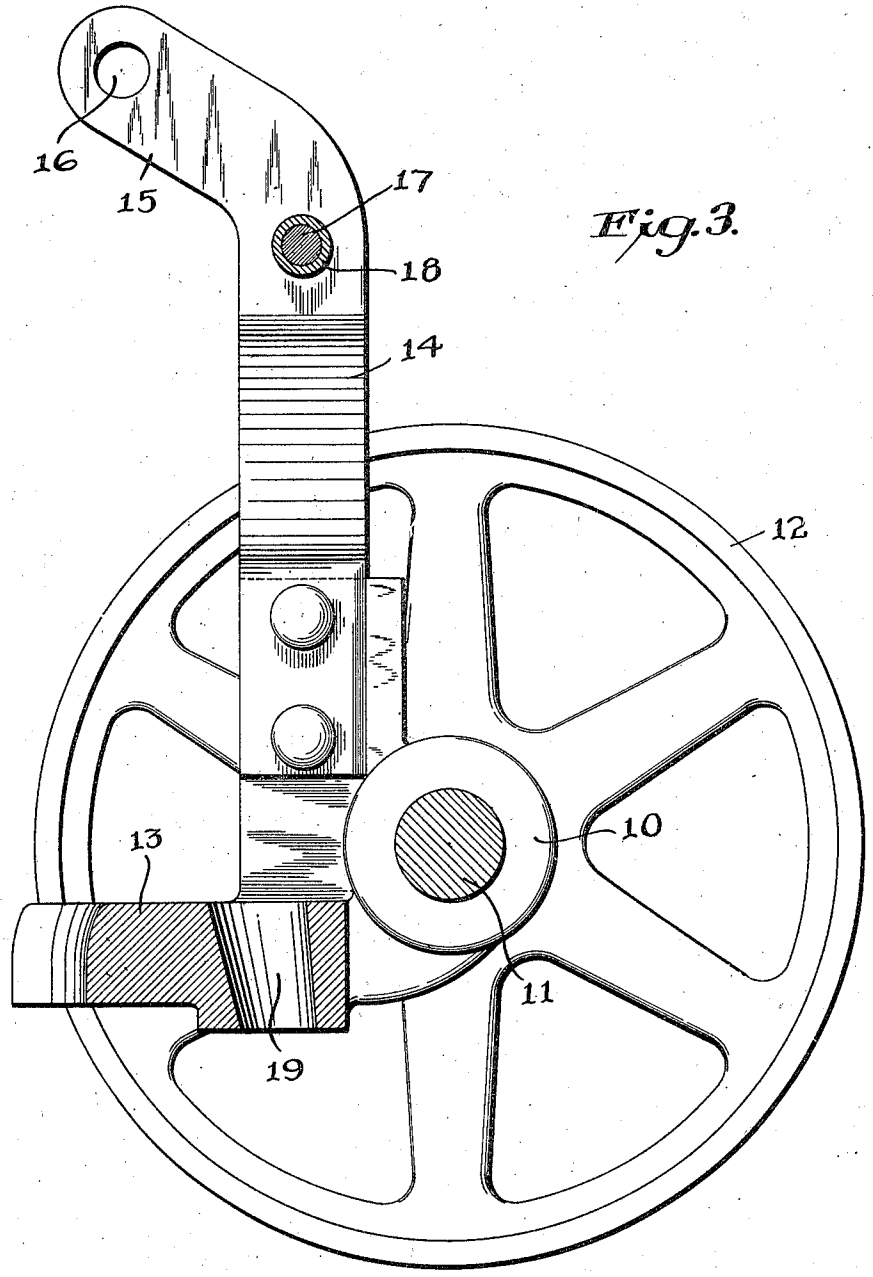


Fig. 3.

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Fig.4.

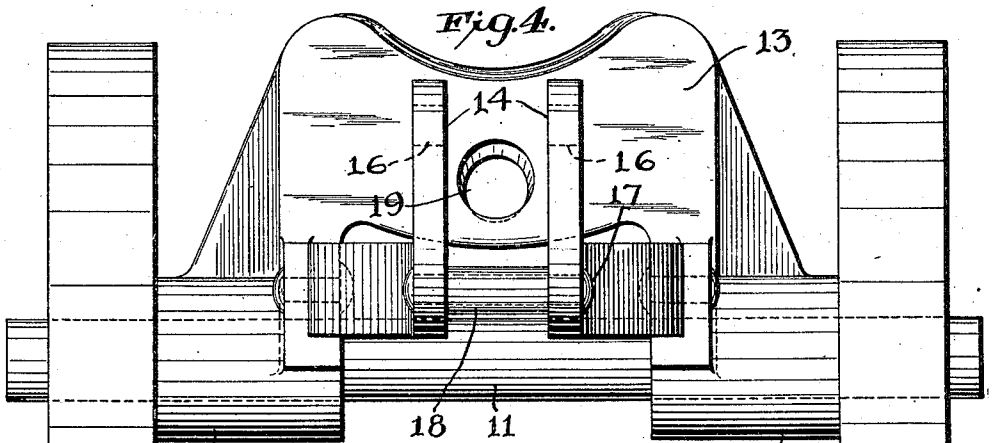
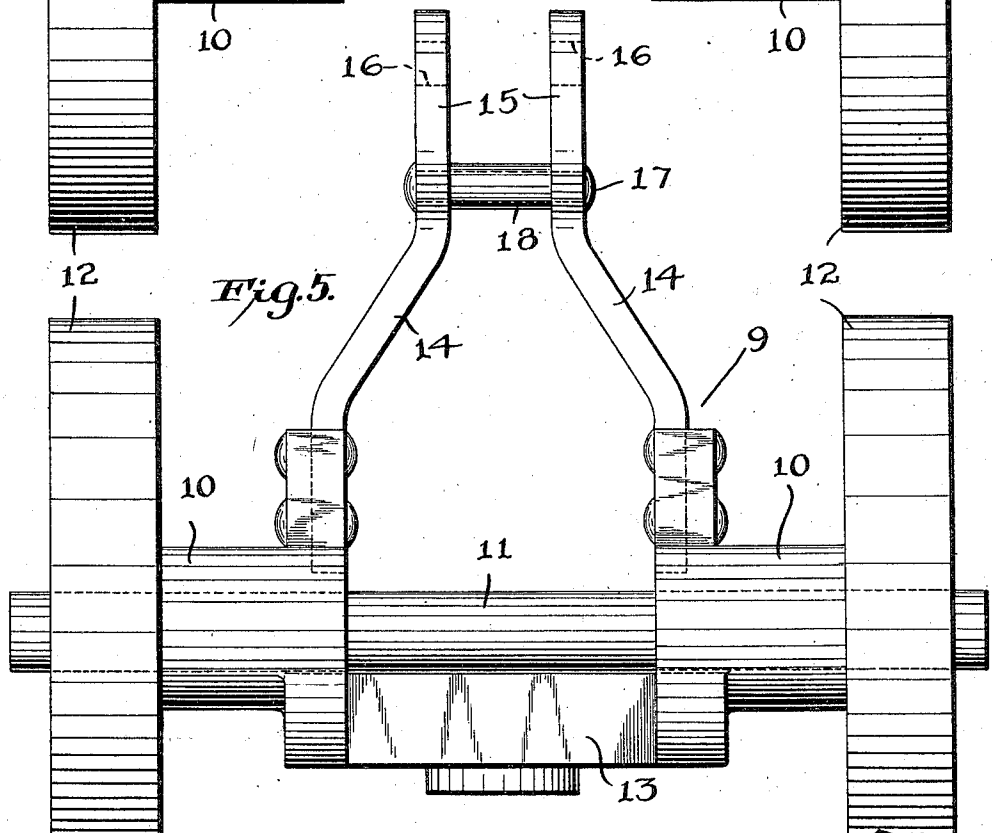


Fig.5.



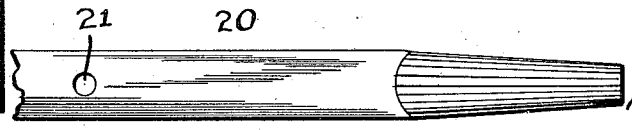


Fig.6.

INVENTOR.
Karl Eck
By
ATTORNEY

Patented July 17, 1923. 1,461,820

UNITED STATES PATENT OFFICE.

KARL ECK, OF BELLEVUE BOROUGH, PENNSYLVANIA, ASSIGNOR TO THE DUFF MANUFACTURING COMPANY, OF PITTSBURGH, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

WHEELING ATTACHMENT FOR LIFTING JACKS.

Application filed August 11, 1920. Serial No. 402,875.

To all whom it may concern:

Be it known that I, KARL ECK, a citizen of the Swiss Republic (who has declared his intention of becoming a United States citizen), residing in the borough of Bellevue, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Wheeling Attachment for Lifting Jacks, of which the following is a specification.

The object of the invention is to provide simple, effective and convenient means in the nature of an attachment, whereby a heavy lifting jack can be tilted off its base and wheeled about.

In the accompanying drawings, forming a part hereof:

Figure 1 is a side elevation of the attachment applied to a jack, the latter being shown in outline, dotted lines being used to illustrate the tilted, wheeling condition;

Fig. 2 is a plan view;

Fig. 3 is an enlarged, central, vertical section through the truck frame;

Fig. 4 is a plan view thereof;

Fig. 5 is a rear elevation; and

Fig. 6 is an elevation of the lower part of the handle.

The jack 1 may be understood to be a high-speed screw jack of the general type disclosed in the Kopf and Schwerin Patent, No. 1,329,665, dated February 3, 1920, having an enclosing frame comprising an expanded supporting base 2, a standard 3, in which the screw-actuated ram, represented by the head 4, is guided, and an annex 5 containing lifting and lowering mechanism. A horizontal operating shaft in this annex bears at its outer end a customary pawl-rocker socket 6, by which the shaft is ratcheted to effect lifting of the load.

On the lower part of the back of the annex, toward the bottom is a shoulder or overhang 7; and some distance above this is a pair of apertured lugs 8. The general region bearing these formations will be termed for convenience the back of the jack.

The attachment comprises a two-wheeled frame or carriage adapted to be applied to the back of the jack while it stands erect upon its base, the wheels being then disposed close to the ground so that the jack can be tilted rearward onto their support by means of a long bar handle. The frame 9 has tubular portions 10, through which passes an axle 11, on the ends of which are wheels 12. At the region of the axle is a forwardly projecting abutment ledge 13, the front of which is curved to fit the back of the jack beneath the overhang 7. The frame also has upwardly extending bars 14 between its wheels, which bars are projected forwardly at the top, forming a pair of horns 15. These horns are spaced to embrace the lugs 8 on the jack, and have apertures 16 to aline with the lug apertures. The upper portions of the bars 14 are tied together by a pin 17 and spaced by a sleeve 18.

In the lower or ledge portion of the frame is a socket opening 19, to receive the butt end of a long bar handle 20, another portion of which is adapted to pass between the lugs 8 and is provided with a transverse hole 21. When the attachment is applied, a pin 22 or the like is passed through the registering openings of the lugs, horns and handle, connecting all three together.

The jack is thus provided with a connection or interlock element, and the carriage with a cooperating element, whereby the carriage frame is pivotally or flexibly connected to the jack frame at the upper point. The same connection also serves as a fastening and one point of leverage for the handle. At points below, the carriage has abutment bearing upon the jack frame, and the handle has a second point of leverage upon the carriage.

When the parts are connected a rearward pull upon the upper part of the handle will hold the carriage firmly against the jack frame and hoist the jack off the ground and more or less over the wheels, enabling it to be readily and safely trundled along the ground. Arrived at the spot where jacking is to be performed, the jack is tilted forward onto its base again, the attachment is separated by withdrawing the pin 22, which also releases the handle, and the latter can then be inserted in the rocker 6 and operated to lift the load.

The handle 20 is such as is ordinarily provided for operating the lifting mechanism, and is here interchangeable in the rocker socket 6 and in the socket of the carriage.

In the aforesaid Kopf and Schwerin patent, the jack frame is shown provided with permanent wheels and with sockets in which the lifting handle can be introduced for

wheeling. The present attachment possesses the advantages that the jack itself is less bulky, that the wheels are not likely to be broken by pressure against the ground in jacking, and that they can be made comparatively large, so that the jack can be wheeled easily and safely over rough ground.

While the preferred and simple form of the invention has been described in detail, it will be understood that I do not limit myself to the precise construction, and that numerous changes can be made without departing from the matters of essential novelty.

What I claim as new is:

1. The combination of a lifting jack having an interlock element on its frame, a two-wheeled carriage having an interlock element above, an abutment portion below and a lower handle socket, and a handle adapted to be fastened with the interlock elements and to have its end inserted in said socket.

2. The combination of a lifting jack having a pair of lugs on its frame, a two-wheeled carriage having a pair of horns to embrace said lugs, an abutment portion below the horns, and a lower handle socket, a handle adapted to stand between said lugs and engage said socket, and means for fastening the lugs, horns and handle together.

3. The combination of the supporting frame of a lifting jack, a two-wheeled carriage, and a lever handle, the jack frame, carriage frame and handle having apertured portions adapted to overlap, and a single pin adapted to pass through all three portions, the carriage frame having further a lower portion to abut the jack frame and a second bearing for the handle.

4. The combination of a lifting jack, a two-wheeled carriage adapted to abut the jack toward the bottom, means for detachably and pivotally connecting the carriage and jack at a point above, the carriage being further socketed for the reception of a handle, and a bar handle adapted to be applied thereto, whereby the carriage can be held firmly against the jack and the latter tilted off its base and onto the support of the wheels.

5. The combination with a lifting jack having an interlock element on its frame, of a two wheeled carriage having a cooperative interlock element above and an abutment portion below, and a handle, whereby the jack can be tilted off its base onto the wheels and rolled about.

6. The combination of a lifting jack having an overhang toward the bottom, and an interlock element higher up, a two-wheeled carriage having an interlock element to cooperate with the interlock element of the jack and an abutment ledge to cooperate with said overhang, and a handle, whereby the jack can be tilted off its base onto the wheels and rolled about.

7. The combination of a lifting jack having a rocker socket for the reception of a handle, a two-wheeled frame also socketed for the reception of a handle, means for applying the frame to a side of the jack, and a bar handle interchangeable in said rocker socket and frame.

8. Attachable means for wheeling a lifting jack, comprising a two-wheeled frame and a separate bar handle, whereby the jack can be tilted off its base onto the wheels and rolled about, the frame having a forward lower portion to abut the jack and a lower socket for the handle, and means above enabling the jack, frame and handle to be pinned together.

9. A truck-attachment for a lifting jack comprising a two-wheeled frame having a forward lower portion to abut the jack, a lower handle socket, and upper forwardly disposed horns formed with transverse opposite pin apertures, substantially as set forth.

10. Attachable means for wheeling a lifting jack, comprising a two-wheeled frame having a lower portion to abut the jack frame, a lower handle socket, a pair of horns above having transverse holes, and a handle adapted to pass between said horns and to have its end inserted in said socket and provided with a hole to register with the holes of the horns, and a pin adapted to pass through the holes in said horns and handle.

KARL ECK.