

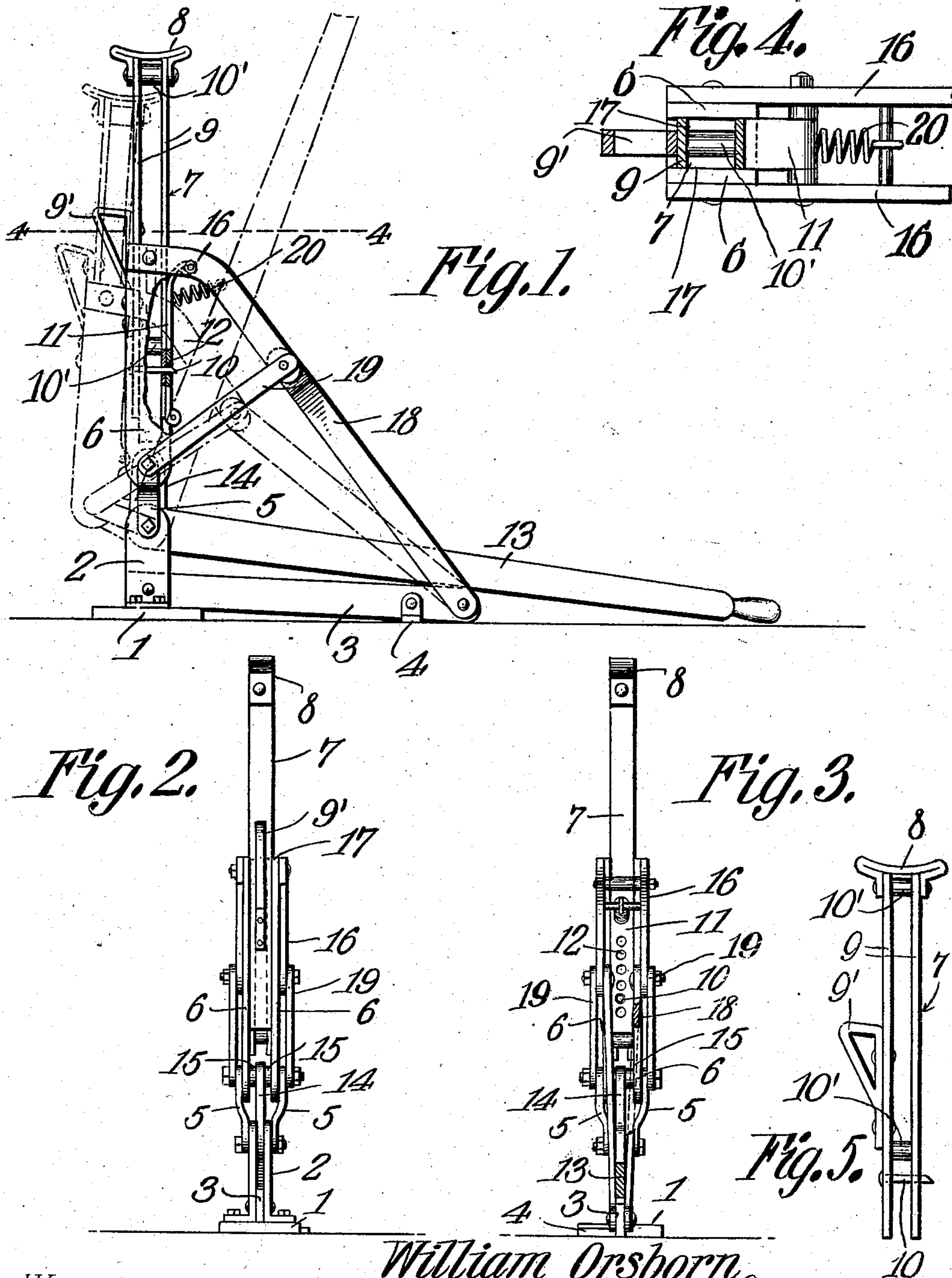
No. 854,904.

PATENTED MAY 28, 1907.

W. ORSBORN & L. GRAEBER.

LIFTING JACK.

APPLICATION FILED OCT. 2, 1906.



WITNESSES.

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WILLIAM ORSBORN AND LOUIS GRAEBER, OF KANSAS CITY, MISSOURI.

LIFTING-JACK.

No. 854,904.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed October 2, 1906. Serial No. 337,095.

To all whom it may concern:

Be it known that we, WILLIAM ORSBORN and LOUIS GRAEBER, citizens of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Lifting-Jack, of which the following is a specification.

This invention has relation to wagon jacks and it consists in the novel construction and arrangement of its parts as hereinafter shown and described.

The object of the invention is to provide a jack of especial construction adapted particularly to be used for lifting carriages, wagons, etc.

In the accompanying drawing:—Figure 1 is a side elevation of the jack. Fig. 2 is a front elevation of the same. Fig. 3 is a rear elevation of the jack with parts in section. Fig. 4 is a horizontal sectional view of the jack on the line 4—4 of Fig. 1. Fig. 5 is a side elevation of the crutch member detached from the jack.

The jack comprises the base plate 1 upon which is located the spaced lugs 2. The forward end of the bar 3 is fixed between the lugs 2, 2, and the rear portion of the said bar is provided with the laterally extending lug 4. The links 5, 5 are pivoted to the upper, outer sides of the lugs 2, 2 and the side bars 6, 6 are pivotally attached to the upper ends of said links. The crutch member 7 is supported between the said bars 6, 6 and is adapted to be adjusted longitudinally thereof. The said member 7 is provided at its upper end with the rest 8 and with an intermediate forward portion thereof with the rest 9'. The lower portion of the said member 7 is composed of the two spaced flanges 9, 9, which are provided with a pin 10, the outer upper end of which is chamfered, as shown in Fig. 1. The flanges 9, 9 are connected together by bolts and collars 10'. The latch 11 is pivoted at its upper end between the said bars 16, 16 and is provided with a series of perforations 12, any one of which is adapted to receive the pin 10. Provision is thus made whereby the crutch member 7 may be sustained in its adjusted position. The lever 13 is fulcrumed between the lugs 2, 2 in alinement with the pivotal points of the lower ends of the links 5, 5. The end 14 of the said lever extends at an angle to the body portion thereof and the extremity of the said end 14 is pivoted between the bars 6, 6 at a point in alinement with the pivotal

points of the upper ends of the links 5, 5. The washers 15, 15 space the said bars 6, 6 from the working end 14 of the said lever. The bars 16, 16 are attached at their upper ends to the bars 6. The guides 17, 17 are attached to the inner sides of the bars 6, 6 and guide the flanges 9, 9 of the crutch 7. The links 18 are pivotally attached at their upper ends to the bars 16 and are similarly attached at their lower ends to the bar 3. The links 19 are pivoted at their upper ends to the bars 16 and links 18, and at their lower ends to the bars 6 in alinement with the upper pivots of the links 5, 5. The spring 20 is interposed between the bars 16 and the latch 11, the tension of said spring is such as to have a tendency to normally hold the parts as illustrated in the dotted lines in Fig. 1.

From the foregoing description, it is obvious that the crutch member 7 may be adjusted in order that the jack may be adapted to lift vehicles which differ in the distances from the axles to the ground. When the lever 13 is carried down into the position as illustrated in heavy lines in Fig. 1, the links 5, 5 and arms 6, 6 will be alined with relation to the lugs 2, 2, so that the parts will remain in such position without providing a catch or other means for holding said lever 13 down. Also when the free end of the lever 13 is lifted slightly and the links 5, 5 are forced out of alinement with the lugs 2, 2, the tension of the spring 20 will force the parts into the position shown in dotted lines in Fig. 1. By reason of the fact that the pin 10 is chamfered at its end, the crutch member 7 may be pulled up to any desired height, but in order to lower the said crutch member, the lower end of the latch member 11 must be forced back against the tension of the spring 20 in order that the pin 10 may disengage the particular perforation 12 thereof that is retaining the same.

Having described our invention what we claim as new and desire to secure by Letters Patent is:—

1. A jack comprising a base, a lug located thereon, a link pivoted to said lug, a bar pivoted to said link, a crutch member supported by said bar, a lever fulcrumed to the lug in alinement with the lower pivot of said link and having its working end pivoted to the bar in alinement with the upper pivot of said link.

2. A jack comprising a base, a lug attached thereto, a link pivoted to said lug, a bar piv-

oted to said link, a crutch adjustably supported by said bar, a lever fulcrumed to the lug in alinement with the lower pivot of the link and having its working end pivoted to the bar in alinement with the upper pivot of the link.

3. A crutch comprising a base, a lug located thereon, a link pivoted to the lug, a bar pivoted to the link, a latch pivoted to the bar and having a series of perforations, a crutch mounted upon the bar and having a pin which enters one of the perforations of the latch, a lever fulcrumed to the lug in alinement to the lower pivot of the link and having its upper end pivoted to the bar in alinement with the upper pivot of the link.

4. A jack comprising a base, a lug located thereon, a link pivoted to the lug, a bar pivoted to the link, a latch pivoted to the bar and having a series of perforations, a crutch mounted upon the bar and having a pin provided with a chamfered nut which enters one of the perforations of the latch, a lever pivoted to the lug in alinement with the lower pivot of the link and having the working end pivoted to the bar in alinement with the upper pivot of the link.

5. A jack comprising a base, a lug located thereon, a link pivoted to said lug, a bar pivoted to said link, a spring actuated latch pivoted to the bar, a crutch adjustably supported by the bar and having means for engaging the latch, and a lever fulcrumed to the lug in alinement with the lower pivot of the link and having its working end pivoted to the bar in alinement with the upper pivot of the link.

6. A jack comprising a base, a lug located thereon, a link pivoted to the lug, a bar piv-

oted to the link, a crutch member supported by the bar and having at its lower portion spaced bars, a latch pivoted to the first said bar, means carried by one of the crutch bars for engaging said latch, a lever fulcrumed to the lug in alinement with the lower pivot of the link and having its upper end pivoted to the first said bar in alinement with the upper pivot of the link.

7. A jack comprising a base, a lug, a link, a bar and a crutch member successively connected together and supported by the base, a bar extending rearwardly from said base, a bar extending rearwardly from the first said bar, a link connecting the last said bars together, a link connecting the last said link, and the first said link together, a lever fulcrumed to the lug in alinement with the lower pivot of the first said link and having its working end pivoted to the first said bar in alinement with the upper pivot of the first said link.

8. A jack comprising a base, a lug, a link, a bar and a crutch successively connected and mounted upon said base, a lever fulcrumed to the base and having its working end operatively connected with said bar, a bar extending rearwardly from the base and a laterally extending foot attached to the rear end of the last said bar.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

WILLIAM ORSBORN.
LOUIS GRAEBER.

Witnesses:

FRED REINHARDT,
JACOB WIDLER.