(No Model.)

H. SUTHERLAND.

WAGON JACK.

No. 588,504. Patented Aug. 17, 1897.

Fig. 1

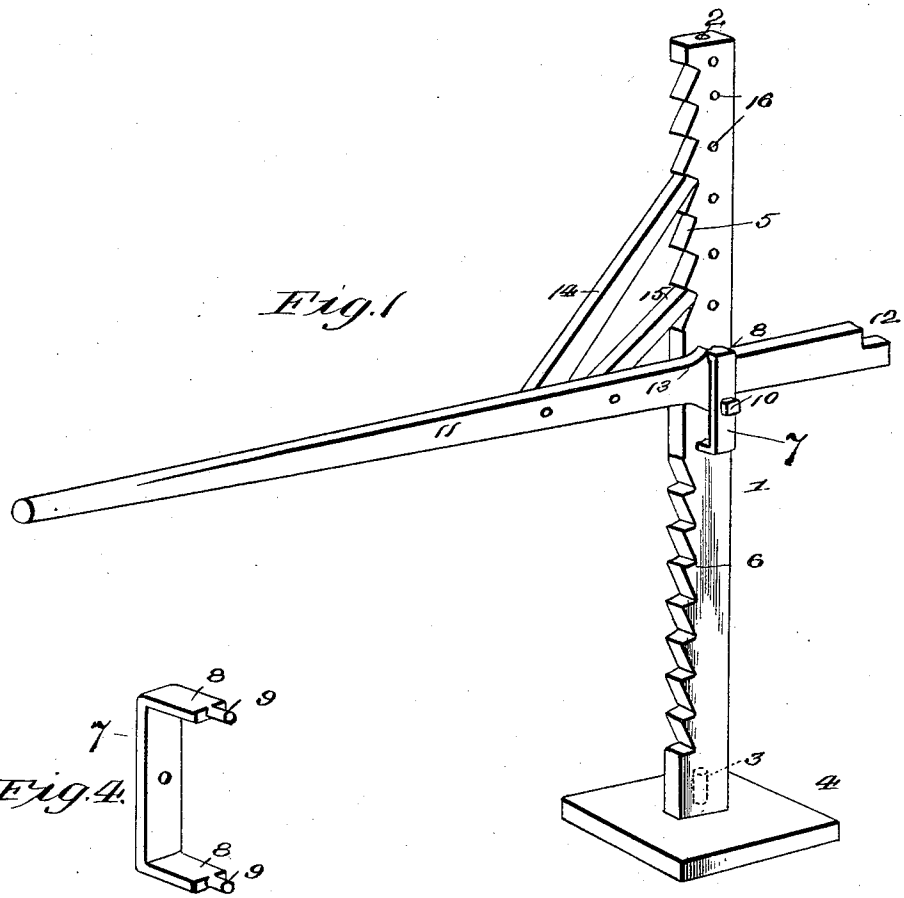


Fig. 4.

Fig. 2.

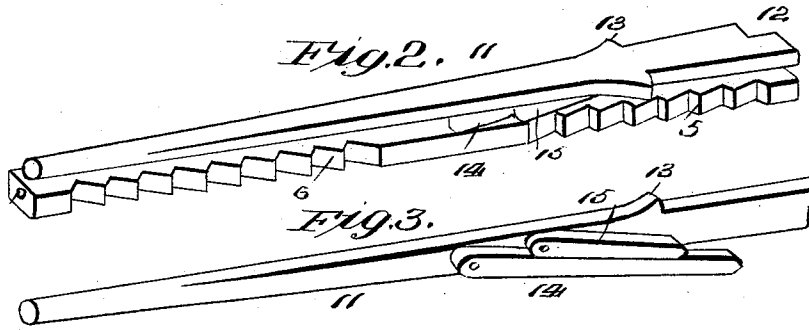


Fig. 3.

WITNESSES

Jos. C. Stack.

Ann. Poynton

INVENTOR

Herbert Sutherland

By John Hedderburn

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HERBERT SUTHERLAND, OF FAIR GROVE, MISSOURI.

WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 588,504, dated August 17, 1897.

Application filed March 24, 1897. Serial No. 629,004. (No model.)

To all whom it may concern:

Be it known that I, HERBERT SUTHERLAND, of Fair Grove, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Wagon-Jacks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in lifting-jacks, the object of the same being to provide a simple and cheap construction of device of this character which is easily operated, is reversible to accommodate it to wagons of different heights, and which may be folded up into compact form for ready shipment.

The invention consists of an upright having two sets of notches at the upper and lower ends thereof, respectively, a removable metallic fulcrum-clip upon one side of said upright, and an operating-lever adapted to fit within said clip and provided with dogs or pawls adapted to engage the teeth along the edge of said upright.

The invention also consists in the other details of construction and combinations of parts, which will be hereinafter more fully described and claimed.

In the drawings forming a part of this specification, Figure 1 represents a perspective view of my improved jack in operative position. Fig. 2 is a similar view of the same shown in its folded position. Fig. 3 is a detail view of the operating-lever. Fig. 4 is a similar view of the fulcrum-clamp which is attached to one side of the upright.

Like numerals of reference indicate like parts in the different views.

My improved jack is made up of an upright 1, constructed of wood, metal, or other suitable material, having longitudinally-extending openings 2 2 at opposite ends thereof, in which is adapted to fit a pin 3, projecting up from the base-piece 4. At opposite ends of the upright 1 one of the side edges thereof is provided with notches or teeth 5 6, respectively, the side edges of said notches inclining toward the center of the upright. At a point intermediate of the outer ends of the upright 1, but a short distance from the center of said upright, is secured a metallic fulcrum-piece 7, which is constructed of sheet metal, having inwardly-extending flanges 8 at opposite ends thereof, which are formed with pins or projections 9, fitting within suitable openings in said upright. Through the center of said fulcrum-piece passes a securing-bolt 10. Fitting within the space between the side of the upright 1 and the inner surface of the fulcrum-piece 7 is a lever 11, which is formed with a notched or cut-away portion 12 at its forward end and has lugs or projections 13 13 on opposite sides thereof, a short distance from the forward end, which serve to limit the inward movement of said lever. Pivoted to the lever 11 at points between the lugs 13 13 thereon and the outer end or handle part of the lever are two pawls or dogs 14 15, the said pawls being adapted to fit within the notches 5 6 in said upright and engage the shoulders formed thereby. The said pawls are adapted to be turned to opposite sides of the lever 11, so as to engage either the shoulders formed by the notches 5 or those formed by the notches 6, according to the position in which the upright 1 is placed. At suitable points the upright 1 is provided with laterally-extending openings 16 16, in which the pins 9 9 and the bolt 10 are adapted to fit for the purpose of adjusting the metallic fulcrum-piece 7 up and down on said upright to accommodate the jack to vehicles of different heights.

From the foregoing description it will be seen that I have devised an extremely simple and effective lifting-jack of few parts which may be folded up into compact form when not in use or for convenience in shipping. By reason of the fact that the upright or standard 1 is formed with the longitudinally-extending openings 2 in the ends thereof said upright is adapted to be reversed and to be applied to the base-piece 4 in the manner heretofore described. The operating-lever 11 may also be reversed, and the dogs 14 and 15 thereon may be brought into engagement with one or the other set of notches 5 or 6 on said upright. As stated heretofore, the fulcrum-piece 7 is located intermediate of the ends of said upright, but a short distance from the center. This will enable the device to be used upon the front and rear axles of vehicles

having wheels of different sizes without the necessity of adjusting the position of the fulcrum-piece itself. Should it become necessary, however, at any time to adapt the device to operate upon vehicles with very low or very high wheels, the same can be done by changing the position of the fulcrum-piece 7. This is effected by removing the securing-bolt 10 and inserting the pin 9 into one or the other of the openings 16 in the side of said upright. These openings 16 have been shown upon only one side of the center of the upright 1. In case the device is to be used upon a low-wheel vehicle the upright 1 will be placed upon the base 4 so that said openings 16 lie adjacent to said base; but if the device is to be used upon high-wheel vehicles the position of the upright will be reversed.

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

1. In a lifting-jack, the combination of a reversible upright having oppositely-disposed notches or teeth along one edge thereof on opposite sides of the center, an operating-lever fulcrumed to said upright at a point intermediate of its ends and pawls pivoted to said lever and adapted to engage either set of said notches or teeth according to the position in which said upright is placed.

2. In a lifting-jack, the combination of an upright having two sets of oppositely-disposed teeth along one edge thereof on opposite sides of the center, an adjustable fulcrum-piece secured to one side of said upright and separated a short distance therefrom, an operating-lever fitting within said fulcrum-piece, and pawls or dogs pivoted to said lever and adapted to engage either set of said notches or teeth according to the position in which said upright is placed.

3. In a lifting-jack, the combination of an upright having notches or teeth along one edge thereof and laterally-extending openings therein, an adjustable fulcrum-piece having inwardly-extending arms at each end thereof with pins or projections on said arms adapted to fit within said openings, a securing-bolt extending through said fulcrum-piece and said upright, an operating-lever fitting within said fulcrum-piece and adapted to engage said bolt, and dogs or pawls pivoted to said lever and adapted to engage the notches or teeth thereon.

4. In a lifting-jack, the combination of a reversible upright having oppositely-disposed notches or teeth along one edge thereof on opposite sides of the center, a fulcrum-piece on one side of said upright, an operating-lever having oppositely-disposed laterally-extending lugs or projections thereon and dogs or pawls pivoted to said lever and adapted to engage said notches or teeth, substantially as and for the purpose described.

5. In a lifting-jack, the combination with a base-piece having an upwardly-extending pin or projection thereon, of a reversible upright or standard having longitudinally-extending openings in the ends thereof in which said pin is adapted to fit and two sets of oppositely-disposed notches or teeth along one edge thereof on opposite sides of the center, a metallic fulcrum-piece secured to one side of said upright and slightly separated therefrom, an operating-lever having oppositely-disposed laterally-extending lugs or projections thereon fitting within said fulcrum-piece, and dogs or pawls pivoted to said lever and adapted to engage one or the other set of said notches or teeth according to the position in which said upright is placed.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HERBERT SUTHERLAND.

Witnesses:
J. A. LONG,
J. F. BOEGEL.