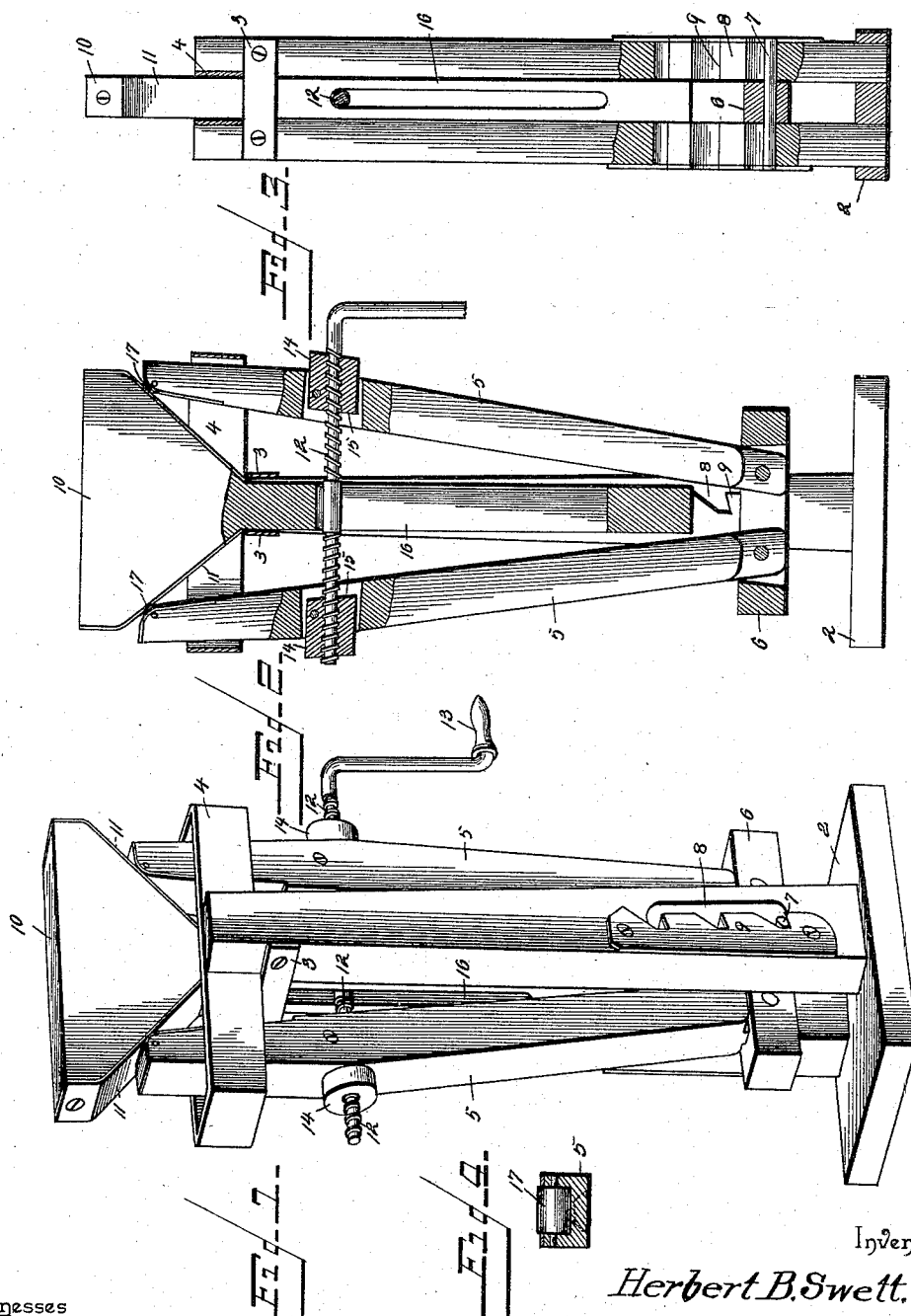


(No Model.)

H. B. SWETT.
WAGON JACK.

No. 535,743.

Patented Mar. 12, 1895.



Inventor

Herbert B. Swett.

By his Attorneys.

Witnesses

Thos. W. Riley
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UNITED STATES PATENT OFFICE.

HERBERT BENTON SWETT, OF SCYTHEVILLE, NEW HAMPSHIRE.

WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 535,743, dated March 12, 1895.

Application filed January 22, 1895. Serial No. 535,810. (No model.)

To all whom it may concern:

Be it known that I, HERBERT BENTON SWETT, a citizen of the United States, residing at Scytheville, in the county of Merrimack and State of New Hampshire, have invented a new and useful Wagon-Jack, of which the following is a specification.

The invention relates to improvements in wagon jacks.

The object of the present invention is to improve the construction of wagon jacks, and to provide a lifting jack of this character adapted to be readily adjusted to adapt it to suit different vehicles, and capable of readily elevating a heavy load with great convenience to the operator.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings: Figure 1 is a perspective view of a wagon jack constructed in accordance with this invention. Fig. 2 is a vertical sectional view taken longitudinally of the screw. Fig. 3 is a similar view, taken transversely of the screw. Fig. 4 is a detail sectional view, illustrating the manner of mounting the anti-friction rolls of the levers.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates a standard, composed of two similar sides or bars, rising from a base or foot-piece 2, adapted to rest upon the ground or other support. The standard has the upper ends of its sides connected by plates 3, and has secured to them a horizontally disposed guide 4, which is substantially rectangular, and which receives a pair of similar levers 5, which are fulcrumed at their lower ends on a cross-piece 6, and which are adjustably connected with the standard. The lower ends of the levers 5 are reduced to form tenons, and are pivoted in mortises of the cross-piece 6, and the latter is arranged in the space between the sides of the standard and is provided with lateral projections 7, fitting in vertical slots 8 of the standard and adapted to engage teeth 9, at one side of each slot. The teeth or shoulders 9 are arranged in vertical

series and afford ready means for supporting the levers at different elevations, to adapt the wagon jack to different sizes of vehicles, to accommodate a high or low axle.

The jack may be constructed of any suitable material, and, when wood is employed, metal plates are preferably secured to the outer faces of the standard and are provided with shoulders or teeth.

Between the upper ends of the levers is arranged a vertically-movable head 10, having opposite inclined sides or edges 11, arranged to be engaged by the upper ends of the levers, whereby, when the latter are forced inward by a horizontally-disposed screw 12, the head 10 will be moved vertically. The upper ends of the levers are slightly rounded and, with the inclined side edges 11, are designed to be provided with metal faces or wear-plates to prevent the parts from being worn. The levers 5 are provided at their rounded portions with anti-friction rolls 17, journaled in suitable recesses of the levers, and projecting slightly beyond the plates of the levers, and bearing against the wear-plates of the head 10. The anti-friction rolls enable the head to be forced upward without friction.

The screw 12, which has right and left hand threads, is provided at one end with a crank-handle 13, and connects the levers, the latter being provided with nuts 14. The nuts 14 are provided with lugs 15, which are secured in recesses of the lever.

The head 10 is guided by a shank 16, arranged between the sides of the standard and provided with a longitudinal slot or opening to receive the screw.

It will be seen that the lifting jack is exceedingly simple and inexpensive in construction, that it combines the principles of the lever, the inclined plane and the screw, and that it is capable of exerting great force at the expenditure of but a small amount of power. It will also be apparent that the wagon jack may be readily adjusted vertically to adapt it to high and low axles, and any desired degree of adjustment may be obtained by increasing the length of the slots of the standard.

Changes in the form, proportion, and the minor details of construction may be resorted to

to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

5 1. In a lifting or wagon jack, the combination of a standard or support, oppositely-disposed levers fulcrumed at one end and having their other ends free, a movable head having inclined faces arranged between the free
10 ends of the levers, and a screw connecting the levers and adapted to force the same inward, substantially as described.

2. In a wagon jack, the combination of a standard, a pair of levers fulcrumed at their
15 lower ends and adjustably mounted on the standard, a head having inclined sides arranged between the upper ends of the levers and adapted to be engaged by them, and a screw for forcing the levers inward, substan-
20 tially as described.

3. The combination of a standard composed of opposite sides provided with vertical slots and having teeth or shoulders, a cross-piece provided with projections arranged in said
25 slots and adapted to engage the shoulders or teeth thereof, levers fulcrumed at their lower ends on the cross-piece, a head having inclined

sides arranged between the upper ends of the levers, and a screw connecting the levers, substantially as described.

4. In a wagon jack, the combination of a standard composed of two sides provided with teeth or shoulders arranged in a vertical series, a cross-piece arranged between the sides
35 of the standard and engaging teeth or shoulders thereof, a horizontal guide or loop mounted at the upper ends of the sides of the standard, levers fulcrumed at their lower ends on the cross-piece and provided with nuts and arranged in said guide or loop, a screw con-
40 necting the levers and engaging the nuts thereof, and a head having oppositely-inclined sides and provided with a shank fitting between the sides of the standard and having a slot receiving the screw, substan-
45 tially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HERBERT BENTON SWETT.

Witnesses:

WILL E. CLEAVES,
ELMER E. ADAMS.