I. B. B. Min,

Lifting Jack,
59, Fatentea Sep. 15, 1868. Fig. 2. Inventor E. Raldun y. C. Cotton

Anited States Patent Pffice.

E. R. BALDWIN, OF SOUTHFIELD, MASSACHUSETTS.

Letters Patent No. 82,069, dated September 15, 1868.

IMPROVED WAGON-JACK.

The Schedule referred to in these Xetters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, E. R. Baldwin, of Southfield, in the county of Berkshire, and State of Massachusetts, have invented a new and improved Wagon-Jack; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

The object of this invention is to provide a wagon-jack that may be operated with greater ease than those now in use, and which is more especially adapted for raising heavy trucks and carts which stand low, but which may also be used with equal facility for high and light wagons.

It consists in providing jacks, as now commonly constructed, with friction-rollers, so disposed, in connection with the moving parts, as to take the pressure of the sliding bracket on the frame to the best advantage, to prevent it from cramping, and relieve the friction of the parts.

It consists also in the construction of that portion of the bracket which rests on the roller in the end of the operating-lever, when in its most elevated position, in such a form that the weight tends to maintain it in the said position.

Figure 1 represents a side elevation of my improved jack, with the bracket shown in an elevated position, in red.

Figure 2 represents a front elevation of the same.

Similar letters of reference indicate corresponding parts.

A represents the stand,

B the bracket, and

C the lever of a jack as now commonly constructed.

My improvement consists in providing the friction-rollers a and b, the former on the lower portion of the bracket, and the latter on the uppermost portion of the stand, both sets so arranged as to take all the lateral pressure of the bracket in either direction, the set a being below the weight, and connected to the bracket, so as to bear against the stand, and the set b being above it, and connected to the stand, and bearing against suitable projections on the bracket.

I have found that those trucks or wagons which are the heaviest are also the lowest, and that in order to provide a jack that will have sufficient range to be useful for vehicles of all heights, it is necessary to make a bracket, B, with a considerable number of steps or notches, d, which requires it to be also of considerable breadth, and in proportion to the increase of breadth, as also of weight of the truck, is the lateral strain of the sliding parts of the bracket on the stand, and consequently the increase of friction.

This is often so great in heavy and low trucks that without the use of the friction-rollers, as arranged by me, they cannot be raised on a jack having sufficient range for vehicles of all heights, as described, and consequently jacks especially adapted to heavy trucks must necessarily be provided, which is avoided by my improvement.

My invention further consists in constructing the under face of the upper portion of the bracket, as seen at e, and in red at e', in the curved form there shown, so that when the bracket has been raised up, and it is required to allow the weight to rest on the top of the friction-wheel f, in the end of the lever, it cannot by any mischance be forced back by the weight.

It will thus be seen that by means of my improvement a jack may be constructed having sufficient range to be used for any vehicles, and by which the heaviest can be raised with great facility.

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

The combination, with the bracket B and stand A, of the friction-rollers a and b, when applied and arranged as and for the purpose set forth.

The above specification of my invention signed by me, this 1st day of July, 1868.

E. R. BALDWIN.

Witnesses:

FRANK BLOCKLEY, ALEX. F. ROBERTS.