(No Model.)

J. G. LANE.

LIFTING JACK.

No. 557,836. Patented Apr. 7, 1896.

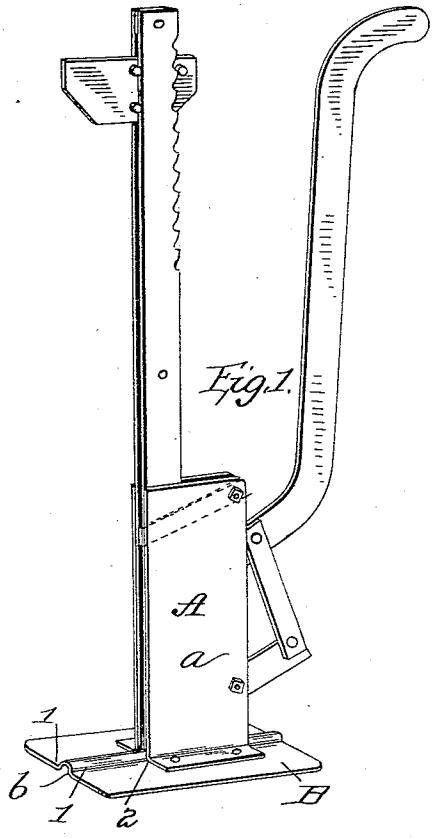
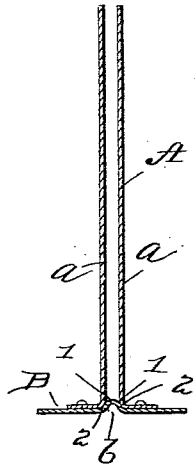


Fig. 1.

Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN G. LANE, OF POUGHKEEPSIE, NEW YORK.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 557,836, dated April 7, 1896.

Application filed November 1, 1895. Serial No. 567,620. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. LANE, a citizen of the United States, residing at Poughkeepsie, in the county of Dutchess and State of New York, have invented certain new and useful Improvements in Lifting-Jacks, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to lifting-jacks of that class designed principally for lifting and holding the axles and wheels of carriages. It is an improvement upon that form of standard and base shown in Letters Patent of the United States granted George Lane on the 28th day May, 1895.

My improvement is shown in the accompanying drawings, in which—

Figure 1 shows the improved jack in perspective. Fig. 2 represents a transverse section of the base-plate and lower part of the standard.

In the drawings I have shown the standard A, the lifting-bar, and the levers and links operating the same exactly as they are shown in the aforesaid patent.

In lifting-jacks of the class shown there are several desirable objects to be attained in order to furnish an altogether satisfactory jack for common use upon carriages. It is desirable, first, in fact it is almost indispensable in the trade, to make the article cheap. In the second place, it must be strong, and the point of greatest strain is where the standard is joined to the base and in the base itself. Other points relating to the working need not herein be enumerated.

The object of my invention herein set forth is to avoid the necessity of a thick heavy plate for the base, and, while reducing the amount of metal, to maintain the strength and at the same time facilitate and cheapen the manufacture by a special construction and combination relating to the lower ends of the standards and the base-plate itself.

For the base-plate B in my improved jack I use comparatively thin sheet metal. This must be made of considerable size in order to rest firmly upon the ground when in operation, and the standards for the same reason must be fixed at about the central portion. The strain upon the base-plate comes upon the line across the plate at right angles to the plane of the lifting-lever. In forming the base-plate, therefore, I strike up or roll a central longitudinally-rounded corrugation, as shown at *b*. As I do not form sharp angles, this may be easily done and without weakening the metal. The side pieces *a a* of the standard are made of sheet metal similar to that of the base, and in order to firmly connect the standard with the base and to fit it accurately and easily to the base I turn out the lower ends of the sides at right angles to the side of the standard. In thus turning them out I bend these ends to form a rounded corner, and in so bending them make them fit exactly to the bend in the base-plate on the line 1 where the base-plate joins the corrugation. The bend in the standard is shown at 2, and without any finishing these parts fit accurately together. As the corrugation is in its outside measurement exactly equal to the space required between the sides of the standard, it forms a spacing-piece, and as it continues the whole length of the plate it forms at the same time a strengthening-rib directly across the line of greatest strain. By this construction I secure not only the object heretofore obtained of spacing the sides of the standards, but I also secure an accurate fit of the parts without finishing, and any required strength in the proper line to resist the strain with a very thin cheap construction of base-plate. The turned-out ends of the sides are riveted to the base-plate by rivets passing down through the plate.

All the parts are very easily formed and put together, and when completed the jack is light, strong, and cheap.

I claim—

In a carriage-jack and in combination a standard composed of sheet-metal sides *a*, having their lower ends turned outwardly and a base-plate having a central longitudinally-rounded corrugation fitted to the space between the sides of the standard and to the bends of said standard, the said outwardly-turned ends being riveted to the base as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN G. LANE.

Witnesses:

GARRETT S. ODELL,

OLIN T. MAMBERT.