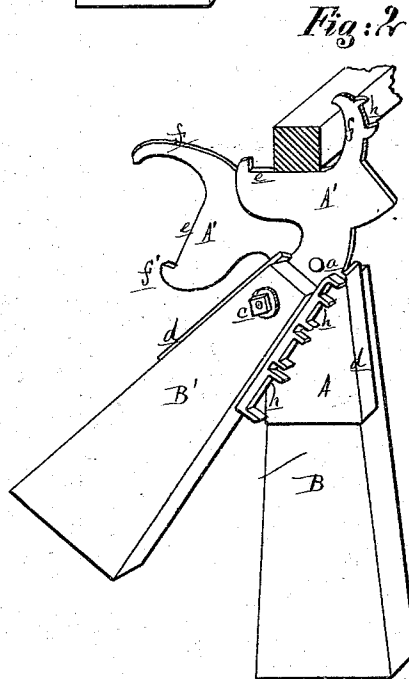
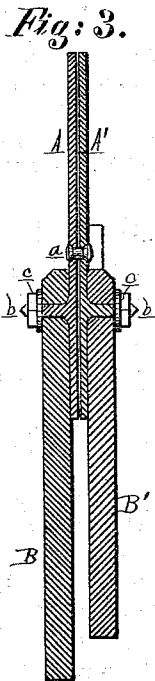
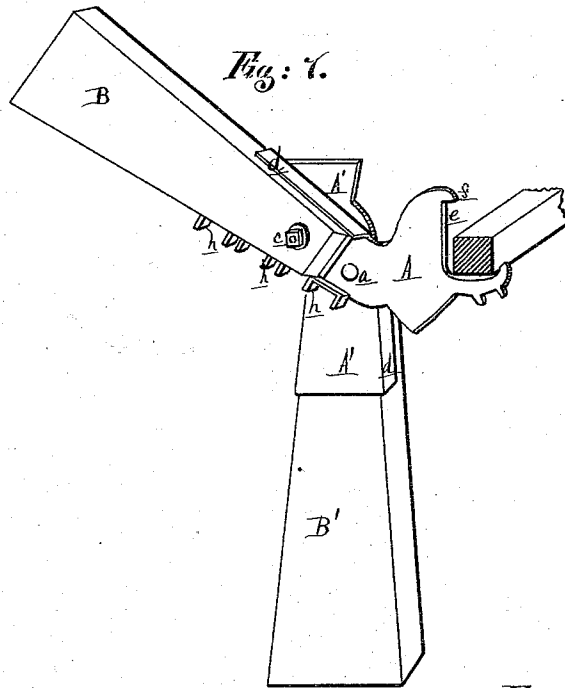


E. E. LEWIS
Lifting-Jacks.

No. 153,902.

Patented Aug. 11, 1874.



Attest.
Wm. H. Halding
Esq. Notary Public

Inventor.
E. E. Lewis
By Attorney
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

EBENEZER E. LEWIS, OF LAWRENCE, KANSAS.

IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. **153,902**, dated August 11, 1874; application filed June 23, 1874.

To all whom it may concern:

Be it known that I, EBENEZER E. LEWIS, of Lawrence, in the county of Douglas and State of Kansas, have invented an Improvement in Wagon-Jacks, of which the following is a specification:

The object of my invention is to provide a wagon-jack capable of lifting axles of varying heights, and to combine with one or both parts of the jack a series of wrench-jaws to suit the various nuts on the vehicle. The invention consists, first, in the peculiar construction of the two metallic heads pivoted together, and the combination therewith of two tapering handles of different lengths; second, the combination, with one or both heads, of a series of wrench-jaws; third, in the manner of securing the heads to the handles; also, in the peculiar construction of the various parts, as more fully hereinafter set forth.

Figure 1 is a perspective view, showing the jack placed under an axle preparatory to lifting it. Fig. 2 is a similar view, showing the axle lifted. Fig. 3 is a longitudinal section taken through the center line of both handles when brought side to side.

In the drawing, *A A'* represent two flat metal plates, pivoted together by a bolt, *a*, each plate being provided with a stud, *b*, on one side, threaded to receive a nut, *c*, which secures the handle *B* or *B'* thereto. The edges of the plates are provided with flanges *d*, to embrace the handles and prevent them from turning on the studs, the said handles being flat tapering pieces of wood of varying lengths, the longer one, *B*, serving to raise the hind or higher axle, and the shorter one a front or lower axle. Their tapering form gives them a broader base, making them steady on the

ground. When one is used as a fulcrum the other is the lever. Beyond the pivot *a* each plate is bent upward, with a straight surface on the end, as at *e*, Fig. 2, on which the axle rests when raised. Under this surface there is a long projecting hook, *f*, which takes under the axle to raise it, while at the upper end there is a short hook, *f'*, to throw it off when lowering. *h h*, &c., are a series of wrench-jaws, bolted or cast to one edge or flange, *d*, of one or both plates, which wrenches fit all the nuts on the vehicle, and are so constructed that the skein-nuts may be screwed up therewith.

The device is light and compact, and may be conveniently kept in the vehicle while on the road.

What I claim as my invention is—

1. The two hooked heads *A A'*, pivoted together, and the combination therewith of the handles *B B'*, of varying lengths, substantially as described.
2. The combination, with one both heads, *A* or *A'*, of the wrench-jaws *h*, as and for the purpose set forth.
3. The studs *b* and flanges *d* of the heads *A A'*, for securing the handles *B B'* thereto, as described.
4. The plates *A A'*, provided with the flat surfaces *e* and hooks *f f'*, as and for the purpose set forth.
5. The tapering handles *B B'*, of varying lengths, each made broad at the base, substantially as and for the purpose set forth.

EBENEZER E. LEWIS.

Witnesses:

WM. H. LOTZ,
HERMAN VOGLER.