

C. E. & F. A. RANDALL.

Lifting-Jacks.

No. 133,484.

Patented Nov. 26, 1872.

FIG. 1.

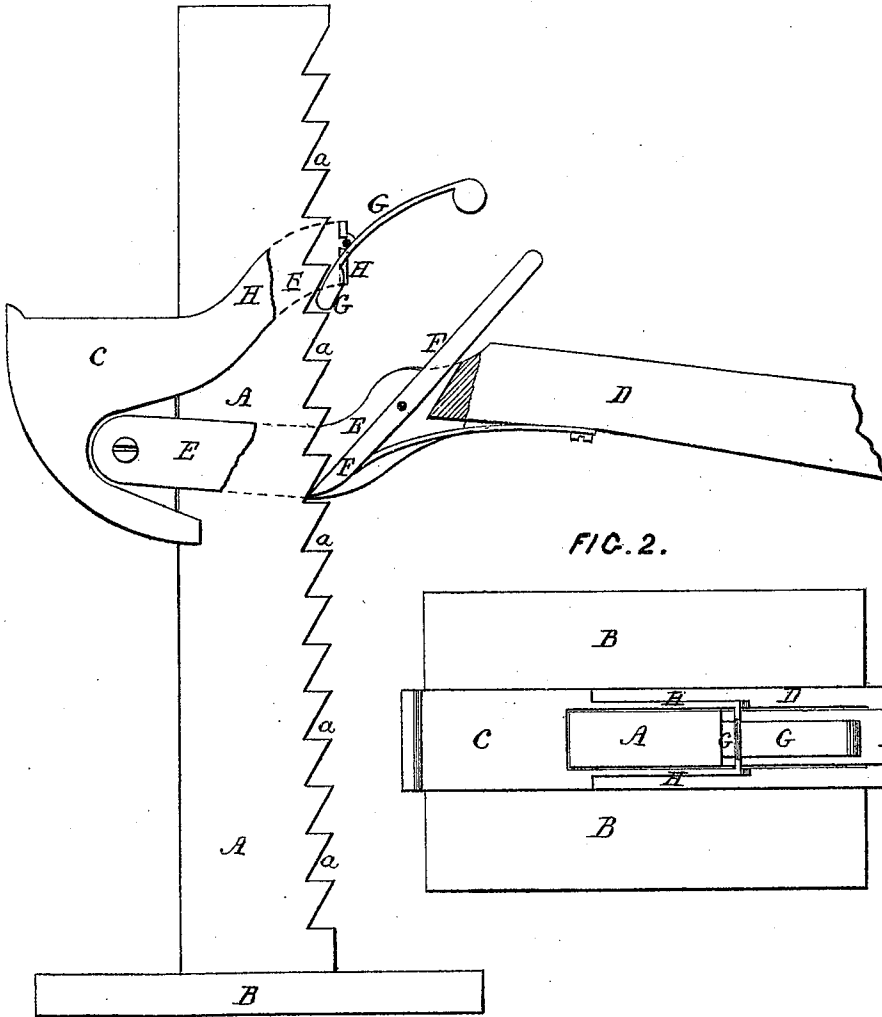
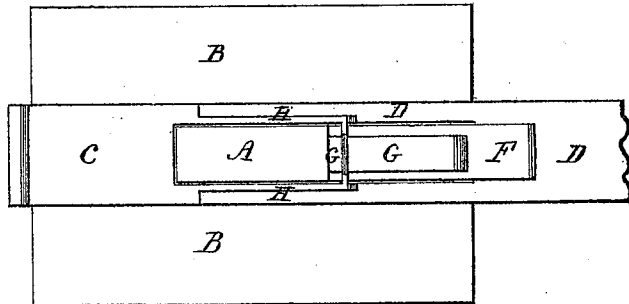


FIG. 2.



WITNESSES  
*J. P. McChoy*  
*W. W. Westcott*

INVENTORS.  
*Charles E. Randall*  
*Frank A. Randall*  
per  
*Brown Brothers*  
*Attorneys.*

# UNITED STATES PATENT OFFICE.

CHARLES E. RANDALL AND FRANK A. RANDALL, OF BOSTON, MASS.

## IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. **133,484**, dated November 26, 1872.

*To all whom it may concern:*

Be it known that we, CHARLES E. RANDALL and FRANK A. RANDALL, both of Boston, in the county of Suffolk and State of Massachusetts, have invented a certain new and useful Improved Jack for Carriage-Axles, &c.; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing.

This invention relates to a jack more especially intended for use as an axle-jack to carriages, wagons, and the like; but, as will be apparent from the description of the jack hereinafter given, it is susceptible of use for other purposes. The invention consists of a jack constructed of an upright, toothed along one edge, in combination with a rest-block for the axle, &c., that is adapted to move up and down in the said upright, and is provided with a lever, carrying a lifting pawl and a holding-pawl, both in position to interlock with the teeth of said upright, and all as herein particularly described.

In the accompanying drawing, the improved axle-jack is illustrated, Figure 1 being a side elevation with portions cut or broken away, and Fig. 2 a plan view.

A in the drawing represents an upright, in the present instance having a base, B. This upright A, along one edge from end to end, has ratchet-teeth, *a*, of equal length and depth. C, the rest-block for the axle, &c. This rest-block C is arranged upon the upright so as to move up and down freely upon the same. D, a lever hung by its bifurcated end E to the block C, the said block C being between the tines of the lever D, and the lever by each tine pivoted to the block, and, together with the block, surrounding and embracing the upright, as shown. F, a spring pawl on lever D. This pawl F is arranged as shown, and that is so that when the lever is raised it passes freely over the teeth, and when the lever is de-

pressed it engages with the ratchet-teeth, causing thereby a lifting of the rest-block C. G, a weighted or leverage pawl hung to the straps H of the rest-block C, above the plane of lever D. This pawl is in position to interlock with the ratchet-teeth of upright A, and its arrangement is as shown, and that is to pass freely over the teeth in the raising of the rest-block, but at all other times to be interlocked with a tooth of the toothed upright, according to the location of the rest-block thereon. The pawl F is the raising-pawl, and the pawl G the holding-pawl.

A jack constructed as above described is used as follows: First, run the rest-block up or down, as may be required, in the upright A to bring it into position for the said block to be placed under the axle, &c., and then raise and depress the lever D. This raising and depressing of the lever intermittently raises the rest-block and thus, through it, the axle. The raising of the rest-block takes place when the lever is depressed, it remaining stationary when the lever is raised and held in position by the holding-pawl G. In running the rest-block to get it into position, release the pawls F G with the hands and it can be more quickly accomplished.

Having thus described our invention, we shall state our claim as follows:

A jack for axles of wagons, &c., composed of a toothed upright, A, rest-block C, lever D, and pawls F and G, all constructed, combined, and arranged together for operation, substantially as described.

The above specification of our invention signed by us this 2d day of November, A. D. 1872.

CHAS. E. RANDALL.  
FRANK A. RANDALL.

Witnesses:

J. P. McELROY,  
EDWIN W. BROWN.