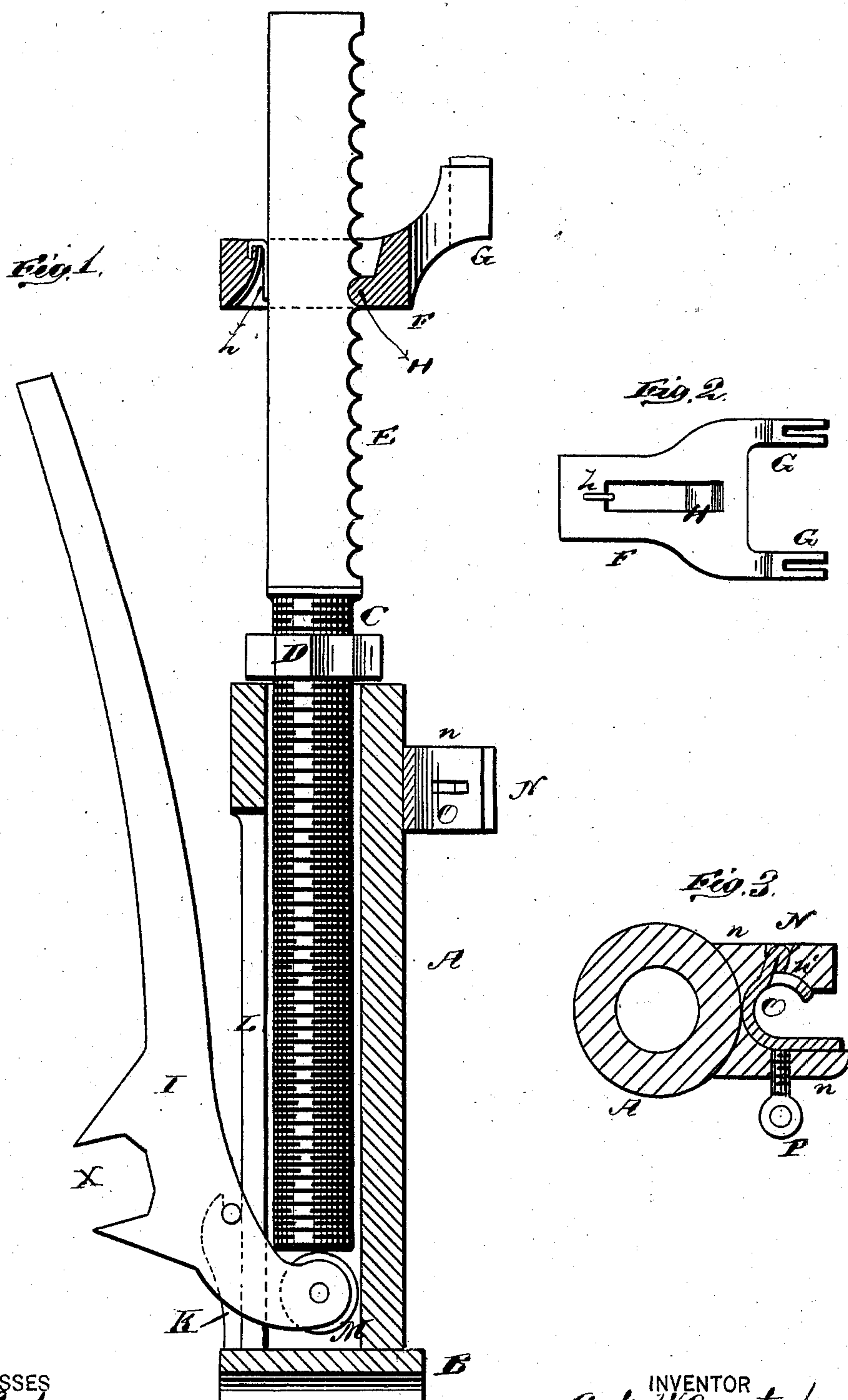


A. W. COMSTOCK.  
Lifting Jack and Tire Tightener.

No. 201,502.

Patented March 19, 1878.



WITNESSES  
*E. H. Bates*  
*D. P. How*

INVENTOR  
*Austin W. Comstock*

*J. C. Sathrop*  
ATTORNEY



# UNITED STATES PATENT OFFICE.

AUSTIN W. COMSTOCK, OF MOUNT PLEASANT, ASSIGNOR OF ONE-HALF HIS  
RIGHT TO J. M. C. SWIMFORD, OF HENRY COUNTY, IOWA.

## IMPROVEMENT IN LIFTING-JACK AND TIRE-TIGHTENER.

Specification forming part of Letters Patent No. 201,502, dated March 19, 1878; application filed  
February 18, 1878.

*To all whom it may concern:*

Be it known that I, AUSTIN W. COMSTOCK, of Mount Pleasant, in the county of Henry and State of Iowa, have invented certain new and useful Improvements in Combined Lifting-Jack and Tire-Tightener; 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 which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to a combined lifting-jack and tire-tightener; and it consists in certain combinations and arrangements of devices, as will be more fully hereinafter set forth.

Figure 1 represents a vertical section of my improved apparatus, and Fig. 2 a detail view; Fig. 3, a cross-section of the standard.

The letter A represents an upright hollow standard, provided with a base, B, having a concave bottom, adapted to fit over the hub of the wheel when the device is employed as a tire-tightener.

The letter C represents a movable standard, the lower part of which is of cylindrical shape, and adapted to fit and slide in the hollow standard A, and is screw-threaded, and provided with a screw-nut, D, by means of which it can be locked against a downward thrust into the hollow standard by the locking-nut D bearing upon the upper portion of the same. The upper portion of said movable standard is rectangular in cross-section and ratcheted, as shown at E, and upon it is mounted a sliding head, F, which is provided with lateral padded extensions G G, which engage the felly of the wheel. Said head is also provided with a tooth or projection, H, adapted to engage the ratchets by means of the spring h, and holds the head F in position.

The letter I represents a lever, journaled in bearings K at the lower part of the standard A, its short arm projecting through a vertical slot, L, in standard A, and being provided with a friction-roller, M, which sets under the lower end of the movable standard C, and

serves to elevate it as required. It is also provided with a wrench, x, at its lower end.

The letter N represents a clamp formed on or attached to one side of the standard A, consisting of two horizontal projections, n n, one of which is hollowed out, as shown at n', for the reception of a pad, O, and the spoke of the wheel. The pad is interposed between said projections n n, to prevent bruising the spoke. P represents a binding-screw, by means of which the spoke is clamped.

The apparatus, when employed as a lifting-jack, is set upon its base upon the ground or other suitable support, with the upper end of the standard C under the axle or other object to be elevated. Upon depressing the lever the standard C is elevated, and can be locked in position by turning the screw-nut down until it rests on the top of the standard A.

When used as a tire-tightener, the base of the standard A is placed upon the hub of the wheel and the clamp made to embrace a spoke. The head F is brought under the felly in proper position, and upon operating the lever said head is forced against the inside of the felly, forcing it out into proper position.

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

1. The combination of the hollow standard A, the movable threaded standard C, and the operating-lever I with the locking-nut D, adapted to rest upon the standard A and prevent inward thrust of standard C, as specified.

2. The combination of the standard A and its base and the clamp N, the screw-threaded and ratcheted standard C and its screw-nut D, and the adjustable head F, provided with extensions G G and a spring-pawl, the whole constructed to operate substantially as shown and specified.

In testimony that I claim the foregoing as my own I herewith affix my signature in presence of two witnesses.

AUSTIN W. COMSTOCK.

Witnesses:

W. I. BABB,

H. W. CARTWRIGHT.