

R. T. SMART & R. T. SMART, Jr.

Improvement in Lifting-Jacks.

No. 126,496.

Patented May 7, 1872.

Fig. 1.

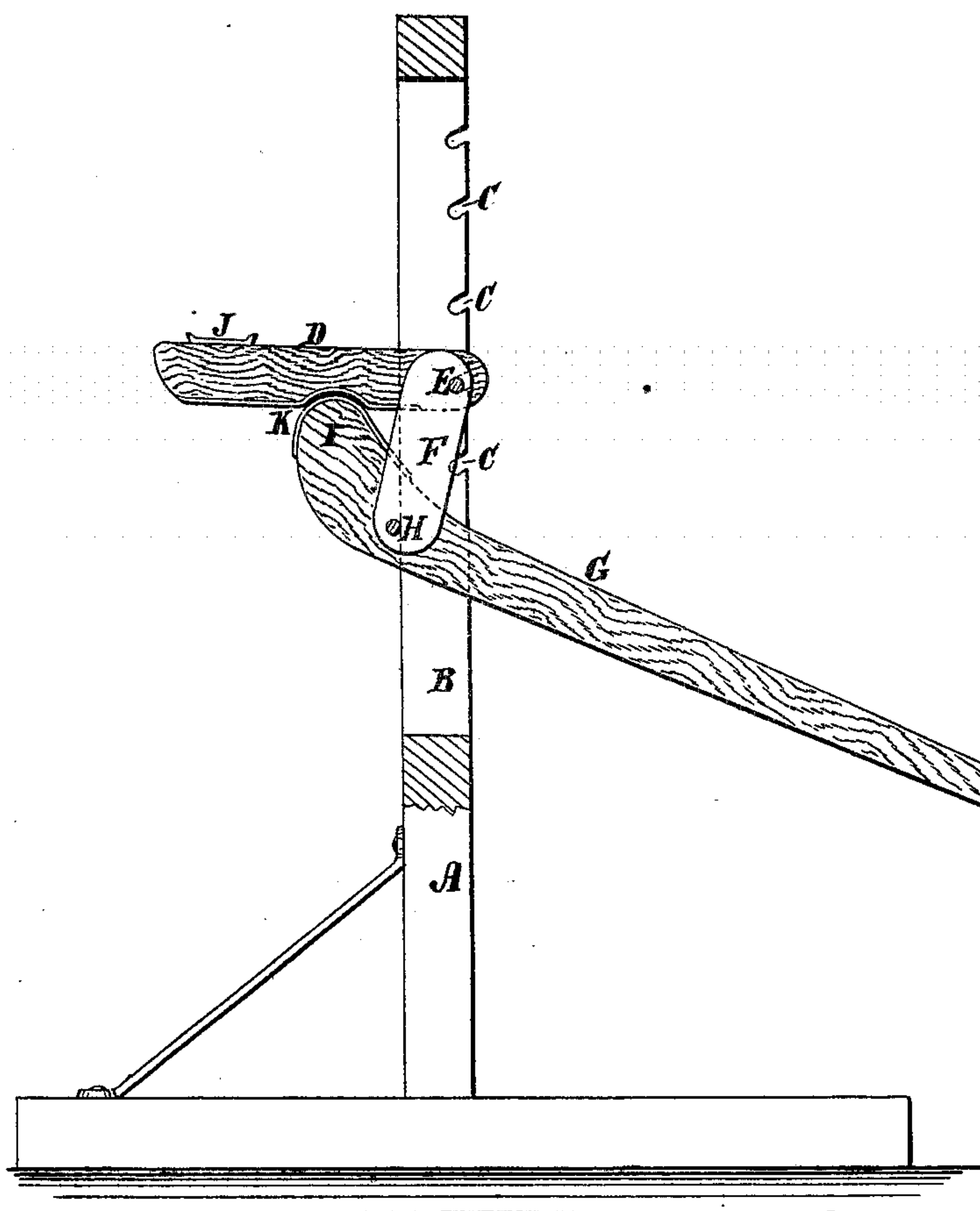
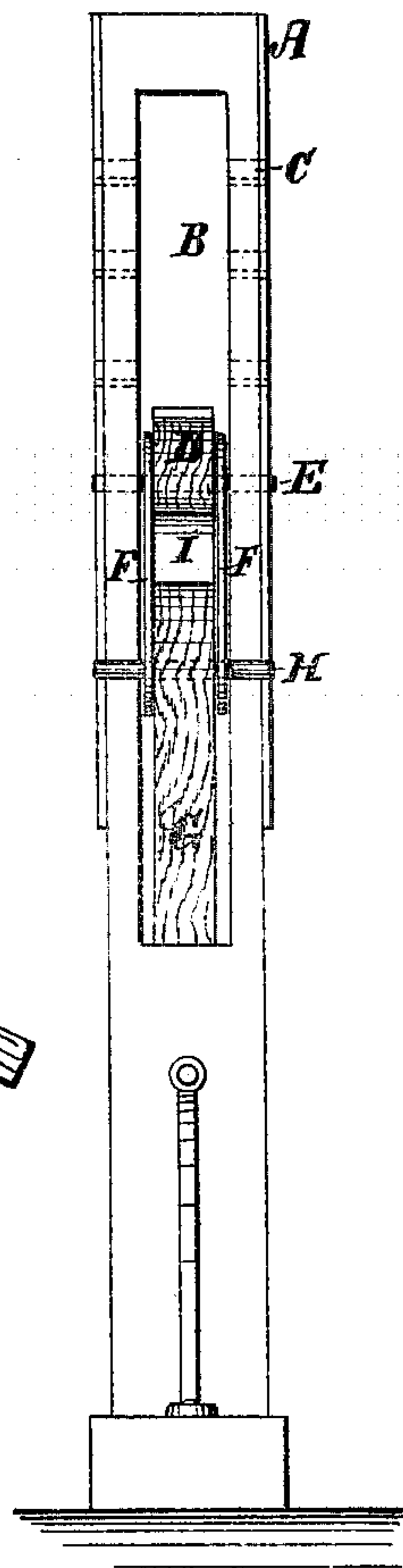


Fig. 2.



Witnesses:

A Bennekenhoff.  
Geo W. Mabee

Inventor:

R. T. Smart  
R. T. Smart Jr.

PER

Munn & Co  
Attorneys.

# UNITED STATES PATENT OFFICE.

ROBERT T. SMART AND ROBERT T. SMART, JR., OF TROY, NEW YORK.

## IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. 126,496, dated May 7, 1872.

Specification describing a new and Improved Lifting-Jack, invented by ROBERT T. SMART and ROBERT T. SMART, Jr., of Troy, in the county of Rensselaer and State of New York.

This invention consists of a short lifting-bar pivoted at one end to the upper ends of links, in the lower ends of which a lever is pivoted to act on the under side of said lifting-bar for swinging up the free end, which is placed under the weight to be lifted, the whole being arranged in a vertical slot of a stand, and suspended by the ends of the pivot-pin of the lifting-bar. The lower ends of the links are prevented from swinging by the action of the resistance on the lifting-bar and the lever. The under side of the lifting-bar has a notch, into which the end of the lever locks self-actingly, to hold the weight up after it is raised. The lifting apparatus is shifted higher or lower on the stand by placing the suspending-pivot in any one of a series of notches in the stand, one above another, for that purpose.

Figure 1 is a sectional elevation of our improved lifting-jack, and Fig. 2 is a front elevation.

Similar letters of reference indicate corresponding parts.

A is a stand, of any suitable kind, with a long vertical slot, B, in the upper part, and a series of transverse notches, C, in one side crossing the slot. D is the aforesaid lifting-bar, having one end fitted to work freely in the slot, and connected by a pivot-pin, E, with a pair of links, F, one on each side, said pin projecting at each end beyond the links to lie in the notches C, as clearly shown. These links extend downward in the slot, and through to the other side, and have the lever G, suspended in the lower ends by a pin, H, projecting at the ends to bear against the side of the

stand opposite the one having the notches C, to hold the lever against being forced back by the weight. The short arm I of said lever curves upward slightly, and is rounded and shod with a metal strap or plate, as shown, to act against the lower side of the lifting-bar, which lies upon it, for raising it up after the load—say the axle of a wagon—has been taken on the plate J, and force it upward. Said lifting-bar has a notch, K, in the under side, into which the end I of the lever comes when the load has been lifted high enough, and by which the said lever is locked self-actingly, to sustain the load without other fastenings, but so as not to prevent being unlocked or disconnected readily when the load is to be let down again by the raising of the long arm of the lever.

The lifting-bar and lever are readily adjusted to the height of the axle or other load to be lifted by shifting the pin E to the different notches.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination of the lifting-bar D, lever I, and connecting-links F with a stand, A, the same being arranged for fastening or locking to support the weight, and to be unfastened by the lever, all substantially as specified.

2. The said lifting-bar, lever, and links, connected by the pins E and H projecting laterally on the sides of the stand A, and arranged to be adjusted in the slot of the same, as shown and described.

ROBT. T. SMART.  
ROBT. T. SMART, JR.

Witnesses:  
D. W. FORD,  
W. GUY.