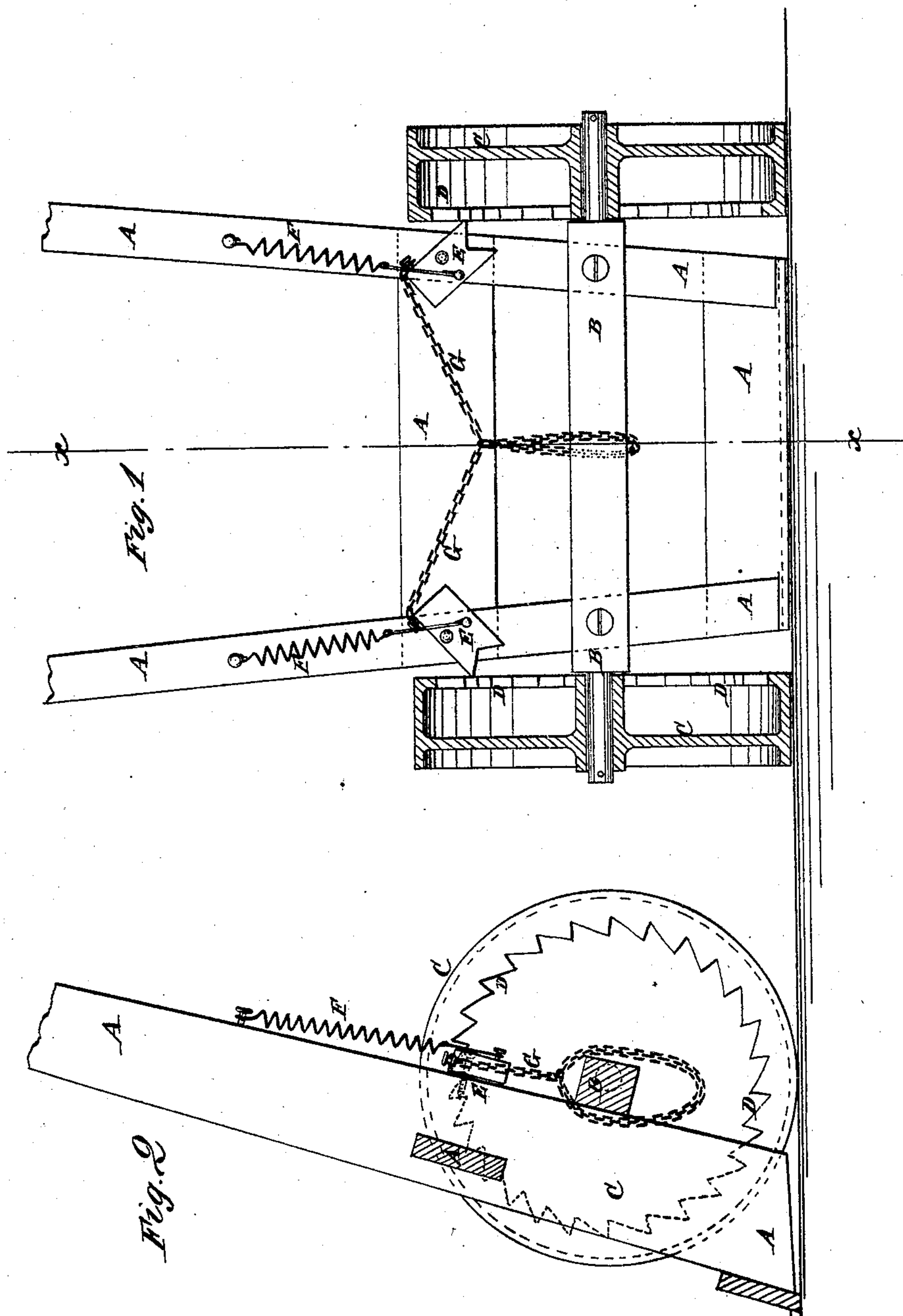


**A. V. SMITH.**  
**Trucks.**

No. 147,073.

Patented Feb. 3, 1874.



WITNESSES:

*A. W. Almqvist*  
*Peugnick*

INVENTOR:

*A. V. Smith*  
BY *Munn & Co.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

ANDREW V. SMITH, OF SAN FRANCISCO, CALIFORNIA.

## IMPROVEMENT IN TRUCKS.

Specification forming part of Letters Patent No. 147,073, dated February 3, 1874; application filed November 22, 1873.

*To all whom it may concern:*

Be it known that I, ANDREW V. SMITH, of San Francisco, in the county of San Francisco and State of California, have invented a new and useful Improvement in Store-Trucks, of which the following is a specification:

Figure 1 is a rear view of my improved trucks, partly in section, through the wheels. Fig. 2 is a vertical longitudinal section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish improved store-trucks, which shall be so constructed that they will keep their place while being loaded, and, at the same time, shall be simple in construction and convenient in use. This invention relates to that class of hand-trucks wherein a ratchet-and-pawl mechanism is employed to retain the truck in a stationary position while loading, as in the patent, No. 114,213, granted to me on the 25th day of April, 1871.

A represents the frame, and B the axle, of the trucks, about the construction of which parts there is nothing new. C are the wheels which revolve upon the journals of the axle B, and upon the inner part of the concave surface of the rim of which are formed ratchet teeth D, as shown in Figs. 1 and 2. E are pawls, which are pivoted to the side bars of the frame A within the circumference of the wheels C, so that their outer ends may be thrown into and out of gear with the ratchet-teeth D by turning them upon their pivots. F are springs, the upper ends of which are attached to the side bars of the frame A toward their handles. The inner ends of the springs F are connected with the pawls E below their pivoting-points, and in such positions that when the pawls E are in gear with the teeth D the line of draft of the springs F may be between the teeth D and the pivots of the pawls E, so as to hold the said pawls in gear with the said teeth D,

and when the pawls E are out of gear with the said teeth D, the line of draft of the springs F may be upon the other or inner side of the pivots of the pawls E, so that the tension of the said springs F may hold the said pawls out of gear with the teeth D. To the inner ends of the pawls E are attached the ends of the chain G, which is made of such a length that its middle part may hang down nearly to the axle B. The middle part of the chain G should be connected with the middle part of the axle, so that it may not swing out of place or hang down and be liable to catch upon objects over which the said trucks may pass.

In using the attachment, when the trucks have been run up to the side of the packages to be moved, and are stood up in the ordinary manner, the operator, as he brings the trucks into the proper position, puts his foot upon the middle part of the chain G and presses it toward the axle B, which throws the engaging ends of the pawls E into gear with the teeth D, locking the wheels C, so that the trucks cannot move back as the packages are placed upon them. When the trucks are loaded a slight forward movement will throw the pawls E out of gear, the incline of the teeth D forcing the engaging ends of the said pawls E back sufficiently to carry the line of draft of the springs F past the pivots of the pawls E.

The pawls E may be made of any suitable shape, but I prefer to make them in the form of a three-armed plate or lever.

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

The pivoted pawls E, the springs F, and the chain G, in combination with the frame-work A, and the ratchet-teeth D of the wheels C, substantially as shown and described.

ANDREW V. SMITH.

Witnesses:

JAMES T. GRAHAM,  
T. B. MOSHER.