

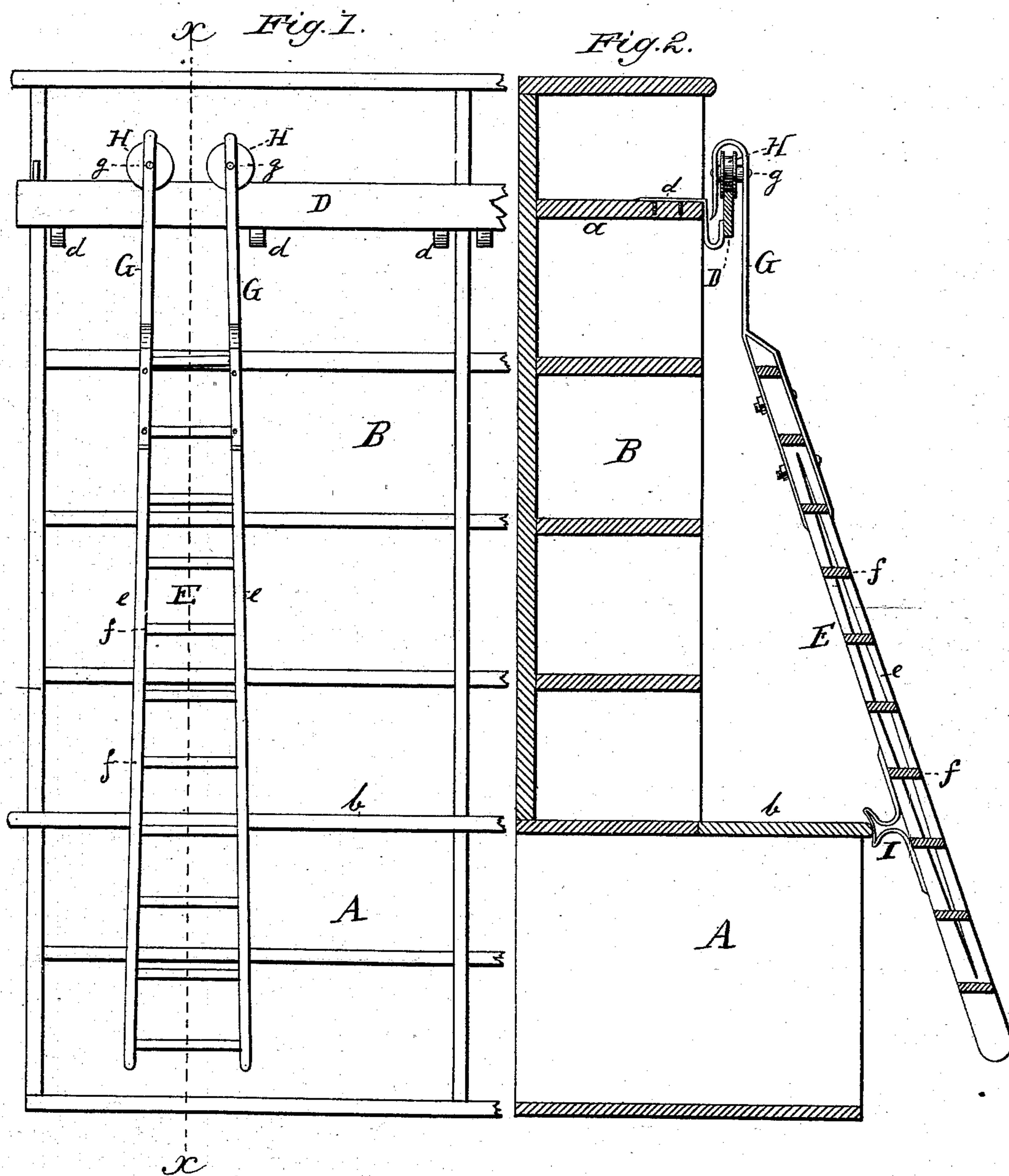
(No Model.)

J. F. TREFTZ.

STEP LADDER.

No. 274,855.

Patented Mar. 27, 1883.



Witnesses.

Will R. Quinlan.

Louis Notting

Inventor:  
J. Fredrick Treftz  
By Wm H Lotz  
Atty.

# UNITED STATES PATENT OFFICE.

J. FREDRICK TREFTZ, OF CHICAGO, ILLINOIS.

## STEP-LADDER.

SPECIFICATION forming part of Letters Patent No. 274,855, dated March 27, 1883.

Application filed January 9, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, J. FREDRICK TREFTZ, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Step-Ladders; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to step-ladders for stores and warehouses; and it consists of a device for suspending a step-ladder to wheels that ride upon a rail secured to the shelving in a manner that a person standing on such ladder can move himself along to reach the desired articles, that are placed a distance apart, without first descending, all as more fully hereinafter described, and specifically claimed.

In the accompanying drawings, Figure 1 represents a front elevation of a shelving with my improved step-ladder suspended thereto, and Fig. 2 a transverse section of the same on line *x x* in Fig. 1.

Corresponding letters in the several figures of the drawings designate like parts.

A denotes the counter-shelf, and B the upper shelving, as usually arranged in stores and ware-rooms. Upon one of the upper shelves, *a*, I bolt, at proper distances apart, bars *d*, the ends of which that project from the front edge of the shelf are hook-shaped, and against the front face of these hook-shaped ends of bars *d*, I rigidly secure by bolts or rivets the rails D, that are preferably flat iron bars butted with their ends to form a continuous single track from one end of the shelving to the other.

E is the step-ladder, that is composed of side bars, *e*, between which the steps *b* are framed or otherwise secured. The lower bifurcated ends of hangers G embrace the upper ends of side bars, *e*, of the step-ladder, and are rigidly connected therewith by bolts or rivets passed through both prongs of the bifurcated ends of hangers G and through such side bars, *e*. The upper portion of hangers G is bent, each to form a long hook, in which a grooved or flanged wheel, H, is pivoted on a pin, *g*, that is passed through holes in both sides of the

hook ends of such hanger G, and is rigidly secured therein by either screwing or riveting. These wheels H ride upon rail D with the hook ends of hangers G projecting below the periphery of such wheels, for the purpose that in case one or both wheels should leave the track from any cause the ladder will still be suspended by the hanger-hooks that grasp over the rail D.

The step-ladder E is of a length that its lower extremity reaches to a convenient distance above the floor for a person to step on it, and it is sustained on an inclined position by saddle-plates or brackets I, that are bolted or otherwise secured against the rear edges of the side bars, *e*, of ladder E, to lean against and slide on the front edge of the top board, *b*, of the counter-shelf A.

As will be noticed, the step-ladder is thus very safely suspended, and requiring no stay-rods, and not reaching to the floor, it takes up but very little space. This ladder is always in readiness for ascending, and the occupant can move himself along easily from one end of the shelving to the other to reach the desired articles without the necessity of descending for the purpose of moving such ladder, it thus being a great accommodation and time and labor saving to the merchant or store-keeper as compared with the heretofore-used common step-ladders, besides its greater safety for the occupant, since it is an utter impossibility for a ladder thus suspended to tip over.

What I claim is—

1. The device herein described of a traveling step-ladder for stores, having flanged wheels at its upper end for suspending it to a rail that is secured to the upper shelving, and with its lower end leaning against the edge of the top of the counter-shelving, all substantially as set forth, to operate as specified.

2. The combination, with the shelving *a* of a store, having attached the rail D, of the ladder E, having hangers G, with wheels H, substantially as and for the purpose set forth.

3. The combination, with the shelving *a* of a store, having attached rail D by bars or brackets *d*, of the ladder E, having hangers G, with wheels H, substantially as and for the purpose described and shown.

4. The combination, with rail D, secured to shelf *a* by bars or brackets *d*, of step-ladder E, having hangers G, with wheels H, that ride upon such rail D, and plates or brackets I, that  
5 slide against the edge of top board, *b*, of the counter-shelf, all substantially as set forth, for the purpose specified.

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

J. FREDRICK TREFTZ.

Witnesses:

LOUIS HOLTING,  
ADAM GEO. WHITE.