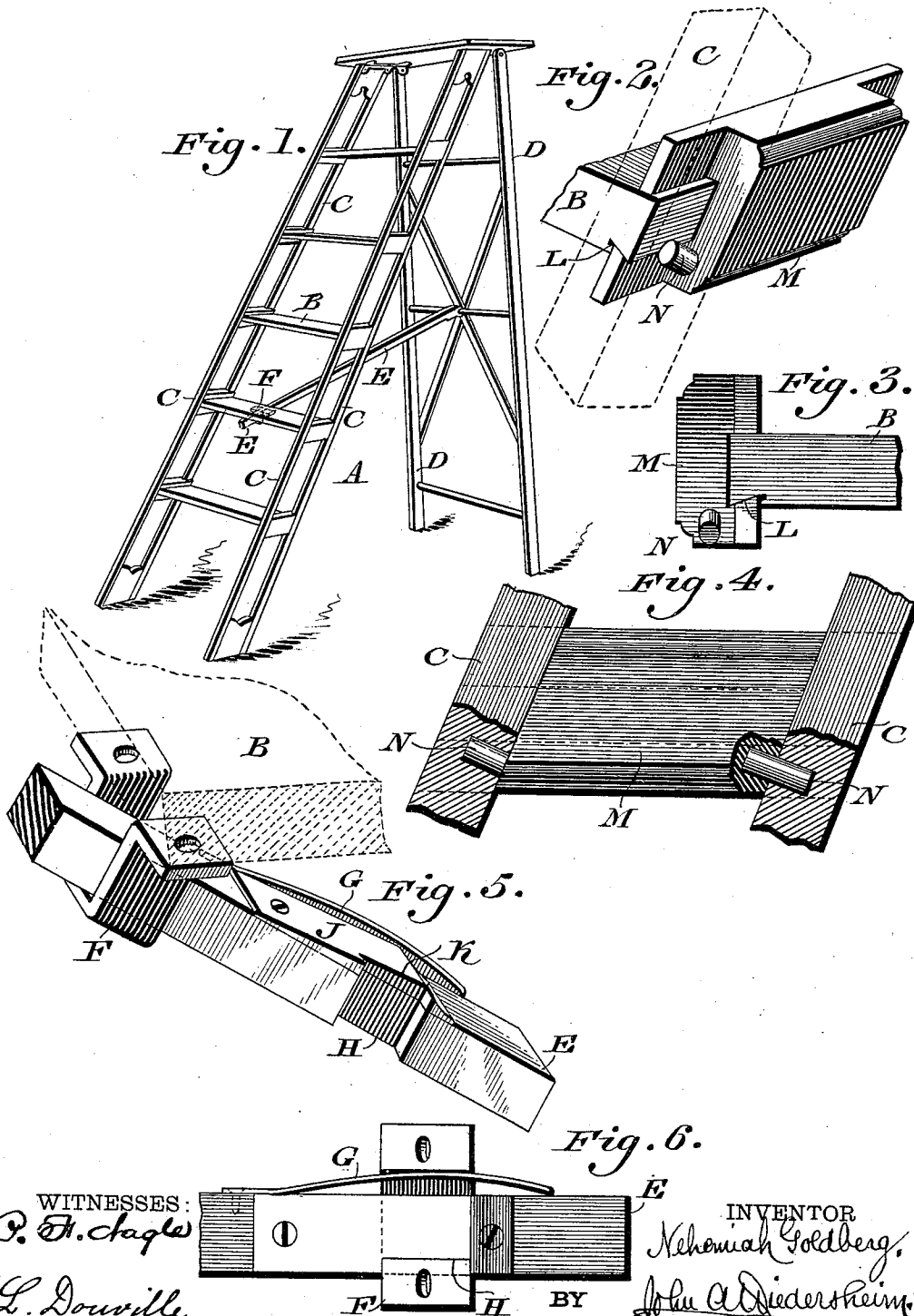


(No Model.)

N. GOLDBERG.
STEP LADDER.

No. 466,096.

Patented Dec. 29, 1891.



WITNESSES:

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STEP-LADDER.

SPECIFICATION forming part of Letters Patent No. 466,096, dated December 29, 1891.

Application filed February 26, 1891. Serial No. 382,924. (No model.)

To all whom it may concern:

Be it known that I, NEHEMIAH GOLDBERG, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Step-Ladders, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a step-ladder having the steps and side pieces connected without the employment of nails, screws, brackets, or similar other fastenings, especially those of a metallic nature.

It also consists in providing the stay with the novel means for engaging the supporting-legs with the ladder.

Figure 1 represents a perspective view of a step-ladder embodying my invention. Figs. 2, 3, 4, and 5 represent perspective views of detached portions thereof on enlarged scales. Fig. 6 represents a top or plan view of a portion of the stay and keeper thereof.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates the ladder proper, the same being formed of the steps B and side pieces C. Pivoted to the top of the ladder are the supporting-legs D, on which is hung the brace or stay E, the free end of which enters a keeper F, which is secured to one of the steps of the ladder A, said stay being provided with a bent spring G, opposite to which is a shoulder H, it being noticed that when the legs D are separated from the ladder in order to sustain the same the spring G rides over and presses against the contiguous side of the keeper, thus forcing the shoulder H into locking engagement with the opposite side of the keeper, and thereby connecting the ladder and legs and preventing closing of the same. In order to release the stay from the keeper its free end is pressed in the direction toward the spring G until the shoulder H clears the engaging wall of the keeper, when the stay is free to slide in the keeper and the leg may be closed or fold against the ladder, as usual in such cases. In order to strengthen the stay around the shoulder H, a piece J, of metal or other suitable material, is connected with the stay and

formed with a shoulder K, registering with the shoulder H.

The steps B are attached, by dovetailed or other locking joints I, to blocks M, and the latter are shouldered on their ends, so as to be fitted between the side pieces of the ladder, it being noticed that said side pieces are in pairs and formed with openings to receive dowels or other pins N, which project laterally from said blocks, it thus being seen that the blocks are secured to and sustained by the side pieces, and the steps are secured to and sustained by said blocks, by which provision the steps are firmly retained in position without the employment of screws, nails, brackets, or similar fastenings.

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

1. A ladder having a step attached by a locking-joint to end blocks, and the side pieces of the ladder connected with said blocks by pins entering said pieces and blocks, whereby the step is sustained without being nailed, screwed, &c., to the side pieces, substantially as described.

2. A shouldered block fitted between side pieces of a ladder and pinned thereto, in combination with a step connected by a locking-joint with said block forming an improvement in step-ladders, substantially as described.

3. A step-ladder having a hinged or pivoted stay provided with a spring on one side thereof and a shoulder on the opposite side, a shouldered piece of material connected to the stay adjacent to the shoulder and spring thereof, and a keeper secured to one of the steps with which said shoulder is held engaged by the action of said spring, said parts being combined substantially as described.

4. A step-ladder having a stay hung on its supporting-leg and provided with a spring and a locking-shoulder, a keeper secured to one of the said steps, and a re-enforce piece for said stay, said parts being combined substantially as described.

NEHEMIAH GOLDBERG.

Witnesses:

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