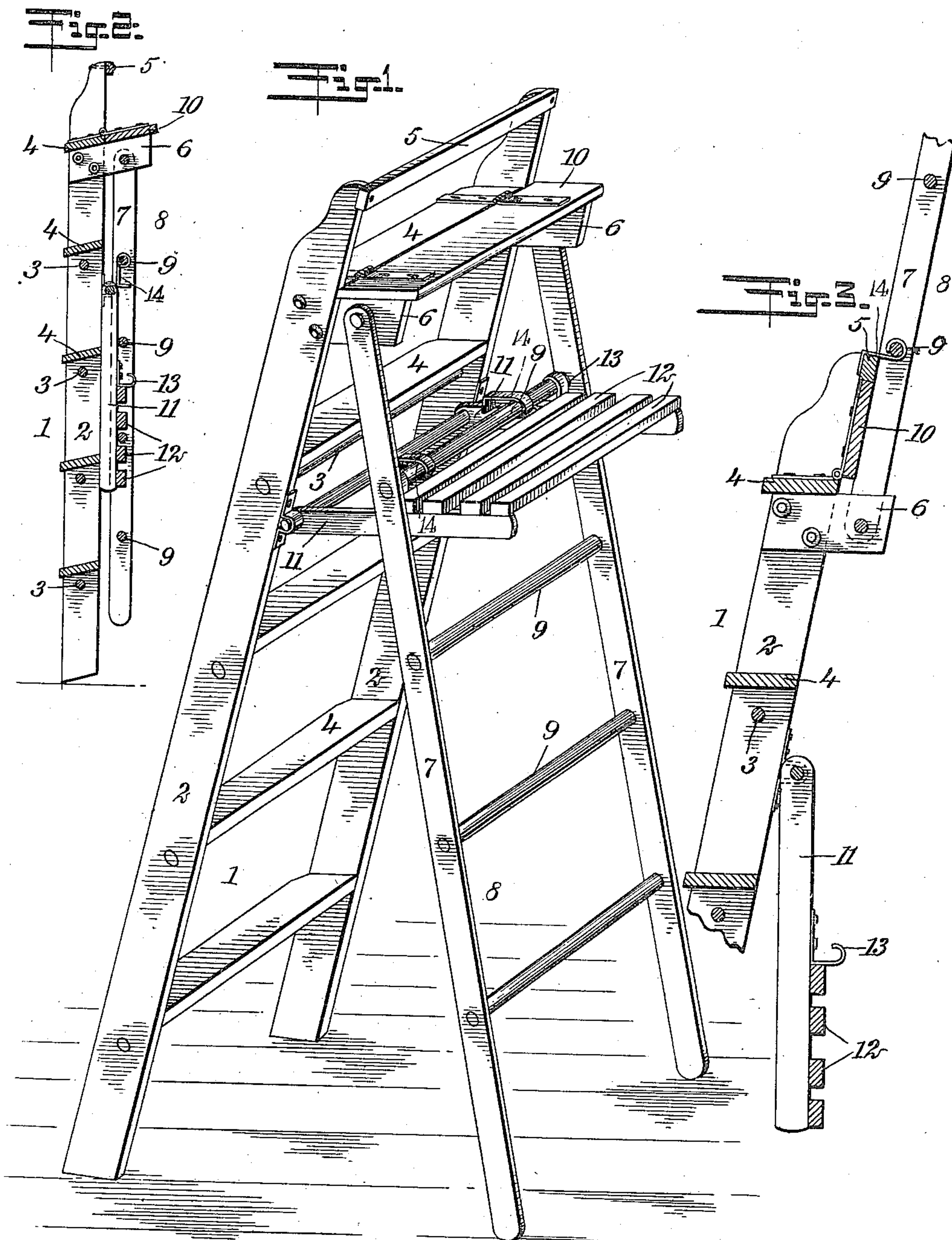


C. W. SPAULDING.
EXTENSION STEP LADDER.
APPLICATION FILED APR. 29, 1910.

964,324.

Patented July 12, 1910.



WITNESSES
F. G. Hackenberg,
E. B. Marshall

INVENTOR
Charles W. Spaulding
BY *Munn & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES W. SPAULDING, OF CLINTON, MAINE.

EXTENSION STEP-LADDER.

964,324.

Specification of Letters Patent.

Patented July 12, 1910.

Application filed April 29, 1910. Serial No. 558,443.

To all whom it may concern:

Be it known that I, CHARLES W. SPAULDING, a citizen of the United States, and a resident of Clinton, in the county of Kennebec and State of Maine, have invented a new and Improved Extension Step-Ladder, of which the following is a full, clear, and exact description.

My invention relates to ladders, and the device is arranged for use as a step ladder, a support for a shelf being pivoted to the main section of the ladder, the support having hooks on its outer face, which are adapted to be disposed on one of the rounds of the auxiliary and extensible section of the ladder, there being cleats on the rear of the main section, to which the auxiliary and extensible section of the ladder is pivoted, the top step of the ladder having a board hinged thereto, the board extending laterally beyond the sides of the main section of the ladder, the board being adapted to be supported on the cleats when in a horizontal position and also being adapted to rest against the sides of the main section of the ladder, which extend some distance above the step to which the board is hinged. When the board rests against the sides of the ladder, it serves as a support for the auxiliary and extensible section when upwardly disposed.

Still other objects of the invention will appear in the following complete description.

In this specification I will describe the preferred form of my invention, but it will be understood that I do not limit myself thereto, as I consider myself entitled to all forms and embodiments of the invention which may be held to fall within the scope of the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, in which—

Figure 1 is a perspective view showing the device erected for use as a step ladder; Fig. 2 is a sectional view on a smaller scale, showing the ladder when folded; and Fig. 3 is a view showing the arrangement of the parts when the auxiliary section is extended upwardly.

By referring to the drawings, it will be seen that the main section 1 of the ladder

has side members 2, which are held together by rounds 3, and which have steps 4, disposed thereover, the steps 4 being secured to the sides 2 of the main section 1. The sides 2 of the main section 1, extend upwardly above the top step 4, and the upper extremities of these sides 2 are united by a member 5. To the rear surface of the sides 2 of the main section 1, are secured cleats 6, to which are pivoted the sides 7 of the auxiliary section 8 of the ladder. The sides 7 of the auxiliary section 8 of the ladder are united by rounds 9. To the top step 4 of the ladder is hinged a board 10, this board extending laterally beyond the sides 2 of the main section 1, and inasmuch as the cleats 6 are secured to the sides 2 of the main section, the width of the board 10 below the plane of the step 4, the board 10 when disposed horizontally on the cleat 6, will be found to lie substantially in the same plane as the upper step 4. Shelf supports 11 are pivoted to the sides 2 of the main section 1 of the ladder, and to these shelf supports 11 are secured shelf members 12. To the outer sides of these shelf supports 11 are secured hooks 13, which are adapted to be disposed on the ends of one of the rounds 9 of the auxiliary or extensible section 8, which in connection with the shelf supports serve to hold the main and auxiliary sections to the ladder at a predetermined distance apart and thereby hold the whole structure in proper position for use.

When the ladder is to be used to reach objects at some distance above the top step of the main section 1, the hooks 13 are removed from the rounds 9 of the auxiliary section 8 of the ladder, and the shelf supports 11 with the shelf members 12 then fall downwardly and when the auxiliary section 8 of the ladder is free, it is extended upwardly, which causes the board 10 to rest against the upper terminals of the sides 2 of the main section 1, the upper edge of the board 10 being disposed just below the lower surface of the member 5. The board 10 in this position acts as a support for the auxiliary section 8 of the ladder and it may be rested against a wall or building, when it is ready for use.

The arrangement of the members forming the ladder, as has been described, produces a ladder which may be constructed very cheaply, one which is extremely strong for

its weight, and which is very convenient and serviceable.

I prefer to secure the member 5 firmly enough to the sides 2 to permit of its being used as a step if occasion requires. Hooks 14 are pivoted to the upper round 9 and are adapted to engage the member 5 when the auxiliary section 8 of the ladder is extended upwardly. These hooks 14 permit of the auxiliary section 8 being secured to the main section 1 when in extended position, which enables the user to carry the ladder from place to place without danger of its closing unexpectedly.

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

1. In an extension step ladder, in combination, a main section consisting of side members with steps therebetween, cleats secured to the rear face of the side members respectively, an auxiliary section consisting of side members and rounds by which they are united, the side members of the auxiliary section being pivoted to the cleats respectively, a shelf member which is hinged to one of the steps, the shelf member extending beyond the side members of the main section and being adapted to rest against the cleats and also against the upper terminals of the side members of the main section respectively, and a shelf which is pivoted to the main section, there being hooks on the upper surface of the shelf,

which are adapted to be disposed on one of the rounds of the auxiliary section.

2. In an extension step ladder, in combination, a main section consisting of side members with steps therebetween cleats secured to the rear face of the side members respectively, an auxiliary section consisting of side members and rounds by which they are united, the side members of the auxiliary section being pivoted to the cleats respectively, a shelf member which is hinged to one of the steps, the shelf member extending beyond the side members of the main section and being adapted to rest against the cleats and also against the upper terminals of the side members of the main section respectively, a shelf which is pivoted to the main section, there being hooks on the upper surface of the shelf, which are adapted to be disposed on one of the rounds of the auxiliary section, and a hook pivoted to the auxiliary section for engaging the main section above the pivotal connection of the auxiliary section to the main section when the shelf member is disposed against the upper terminals of the main section.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHAS. W. SPAULDING.

Witnesses:

BERT N. TOZIER,
CORA A. DODGE.