

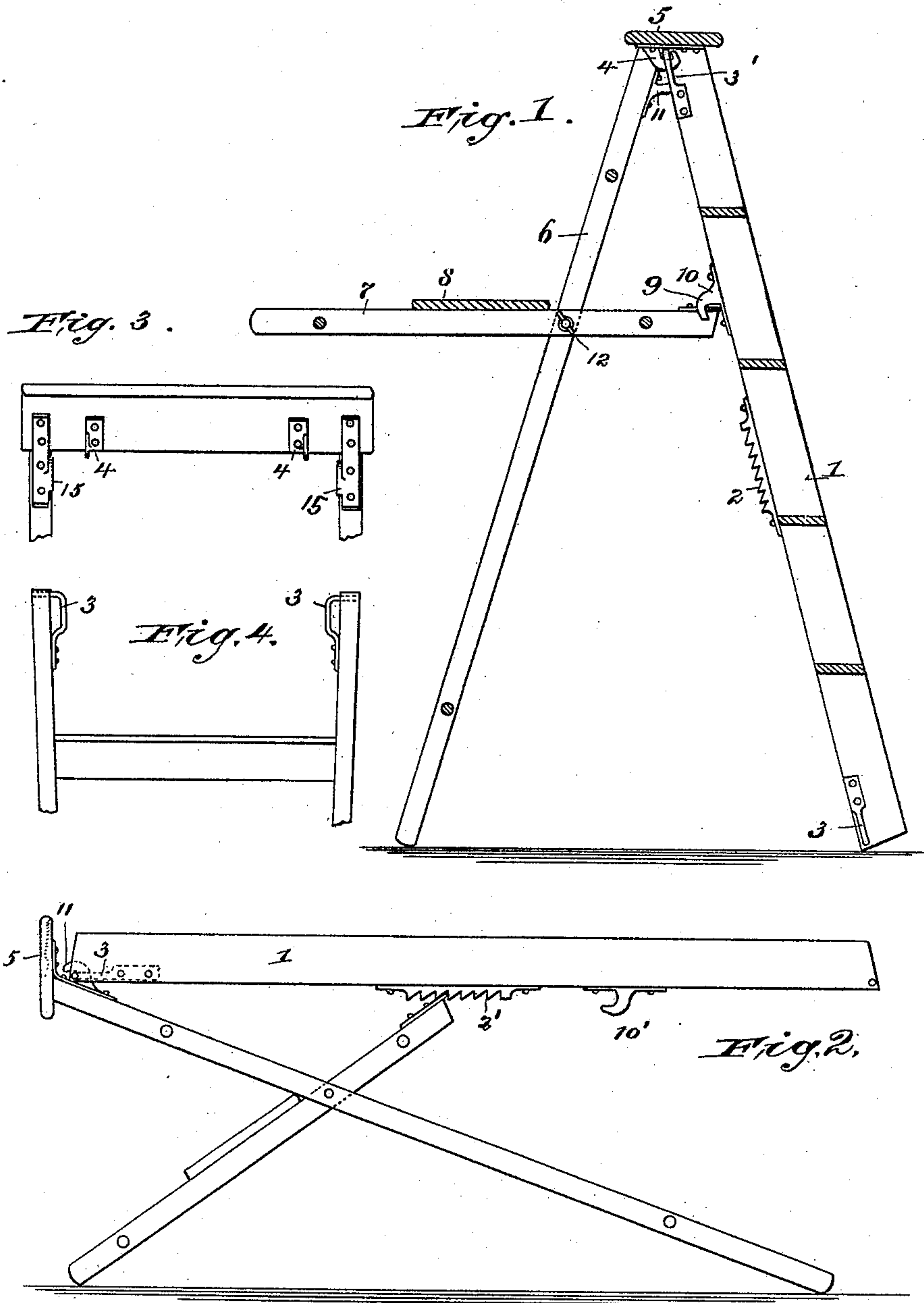
(No Model.)

W. H. LISH.

COMBINED STEP LADDER AND IRONING BOARD HOLDER.

No. 472,303.

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UNITED STATES PATENT OFFICE.

WILLIAM HENRY LISH, OF YORK, PENNSYLVANIA, ASSIGNOR TO GEORGE H. BECKER AND HENRY BRUBAKER, OF SAME PLACE.

COMBINED STEP-LADDER AND IRONING-BOARD HOLDER.

SPECIFICATION forming part of Letters Patent No. 472,303, dated April 5, 1892.

Application filed July 30, 1891. Serial No. 401,156. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY LISH, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in a Combined Step-Ladder and Ironing-Board Holder; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to make a step-ladder for domestic use, which will combine simplicity of construction with strength, and will be readily convertible into an ironing-board holder when desired.

In carrying out my invention I make the ladder and its bracing-frame of two independent separable pieces, the ladder being reversible end for end, so that in one position of adjustment a step-ladder will be formed and in the other a frame upon which an ironing-board can be placed and find a firm support.

The invention involves certain structural features, which will be hereinafter described, and specifically indicated in the appended claims.

In the accompanying drawings, which illustrate this invention, Figure 1 is a median vertical section illustrating the device when adjusted for a step-ladder. Fig. 2 represents a side elevation of the device when assembled to form an ironing-board holder. Figs. 3 and 4 are detail views illustrating the hooks and eyes for holding the parts together.

1 represents the ladder provided on its side bars about midway of its length with toothed racks 2 2', one being secured to each side bar. At each end of each side bar is secured metallic eyes 3 or 3', the latter adapted to co-operate with hooks 4, rigidly fixed to a top board 5 of the bracing-frame 6. This top board 5, with the bracing-frame, forms the top step of the ladder, as illustrated in Fig. 1.

The eyes 3' are mounted on the inner side of the side bars of the steps and the tops of the side bars are beveled, so that the ladder and bracing-frame may spread to a suitable angle, and in this condition the hook and eye act as a pivot, and the tops of the side bars

bear against the under side of the board 5 and prevent the ladder from spreading. This arrangement enables the ladder to be used with safety and convenience without tilting the frame 7, upon which the pail-support 8 is mounted, and dispenses with the necessity of extra braces or stays. When, however, it is desired to use the latter, it can be tilted to the position illustrated in Fig. 1. It is provided with a metal bar 9, which co-operates with fixed hooks 10 10' and forms an additional stay for the ladder and throws the pail-board 8 in position to receive a water-bucket or tools which may be needed while the ladder is in use.

Upon one end of the bracing-frame are mounted two pairs of hooks 4 4 and 11 11, the former of which, as stated, are used in connecting the bracing-frame with the ladder, as indicated at Fig. 1, and the latter of which are used in forming the ironing-board holder. The former are set a sufficient distance from the outer hooks to co-operate with the eyes 3' upon the narrow end of the ladder. The outer hooks co-operate with the eyes 3, mounted in the wide end of the ladder.

To adjust the apparatus so as to form an ironing-board stand or holder, the parts are disconnected, the ladder reversed end for end, so as to bring the eyes 3 around the hooks 11 11 of the bracing-frame, and the pail-support is tilted, so that the metal bar 9, which projects beyond the end, will fall into the teeth of the racks 2 2'. The device then when set in the position illustrated in Fig. 2 constitutes a stiff frame upon which an ironing-board may be laid. It will be noted that the frame in this position has a wide supporting-base, and that the end of the ironing-board will be so supported that no braces or other obstacles will interfere with the convenient manipulation of shirts or other garments which should be shifted around the board while the ironing operation is being conducted.

It is with a view to facilitating the ironing that the two sets of connecting-eyes are placed at opposite ends of the ladder, which enables the narrow end of the ladder to project horizontally, and thus permits of shirts or similar garments being slid over it. Otherwise a sin-

gle hook connection might be utilized to adjust the device either for the step-ladder or ironing-board holder.

It will be noted that the structure described presents several marked advantages over devices of this character as heretofore constructed. The ladder and the bracing-frame being separable, the ladder may be used with convenience when detached from the latter—a desideratum of considerable importance when it is desired to get close to a wall or corner. The step-ladder, with its connecting parts, is of great simplicity of construction, having simply a hook and eye, with a fulcrum so located that the ladder cannot spread too far. The advantage of the projecting end of the horizontal support for the ironing-board is of great importance in ironing skirts and shirts, as already noted. The support 7 for the pail-board at its pivotal point is provided with a thumb-screw 12, which can be adjusted to impart the desired amount of stiffness to the joint. The hooks 11 are formed integral with a metallic bracket, which acts as a stay for the board 5, as illustrated in Fig. 2. This imparts great stiffness to the board and prevents it from working loose from the bracing-frame.

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

1. A step-ladder comprising a ladder and bracing-frame detachably connected by a pivotal joint, the top board of the ladder being attached to the bracing-frame and forming a bearing-surface for the side bars of the ladder to prevent undue spreading, whereby the ladder may be used alone or combined with the bracing-frame, as desired.

2. A step-ladder comprising a ladder and bracing-frame, hooks 4, attached to one of

these parts, and eyes 33', attached to the other, adapted to form a pivotal connection at the angle of junction, and a top board 5, secured to the bracing-frame and so placed as to form a bearing-surface for the top of the ladder to prevent undue spreading, whereby the steps may be used alone or combined with the bracing-frame, as desired.

3. In a step-ladder, the combination of the ladder, with a detachable bracing-frame connected together by a hook-joint, a supporting-frame for a pail hinged to the latter, and a hook connection between the side bars of the ladder and the inner end of the pail-frame, whereby the ladder may be readily disconnected from the bracing-frame for independent service.

4. In a step-ladder, the combination of the ladder and separable bracing-frame hinged together, pivoted pail-frame mounted on the latter, hooks 10 for preventing the pail from tilting when in service, and thumb-screw 12 for maintaining a stiff pivotal connection between the pail-frame and the bracing-frame.

5. In a step-ladder, the combination of the ladder and separable bracing-frame pivotally connected therewith, the former being provided with connecting devices at either end, so as to be reversible end for end with relation to the bracing-frame, pivoted frame, as 7, mounted on the bracing-frame, and racks 2, mounted on the ladder, adapted to lock the pivoted frame when adjusted, for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM HENRY LISH.

Witnesses:

JOHN C. RUHL,
E. O. EVANS.