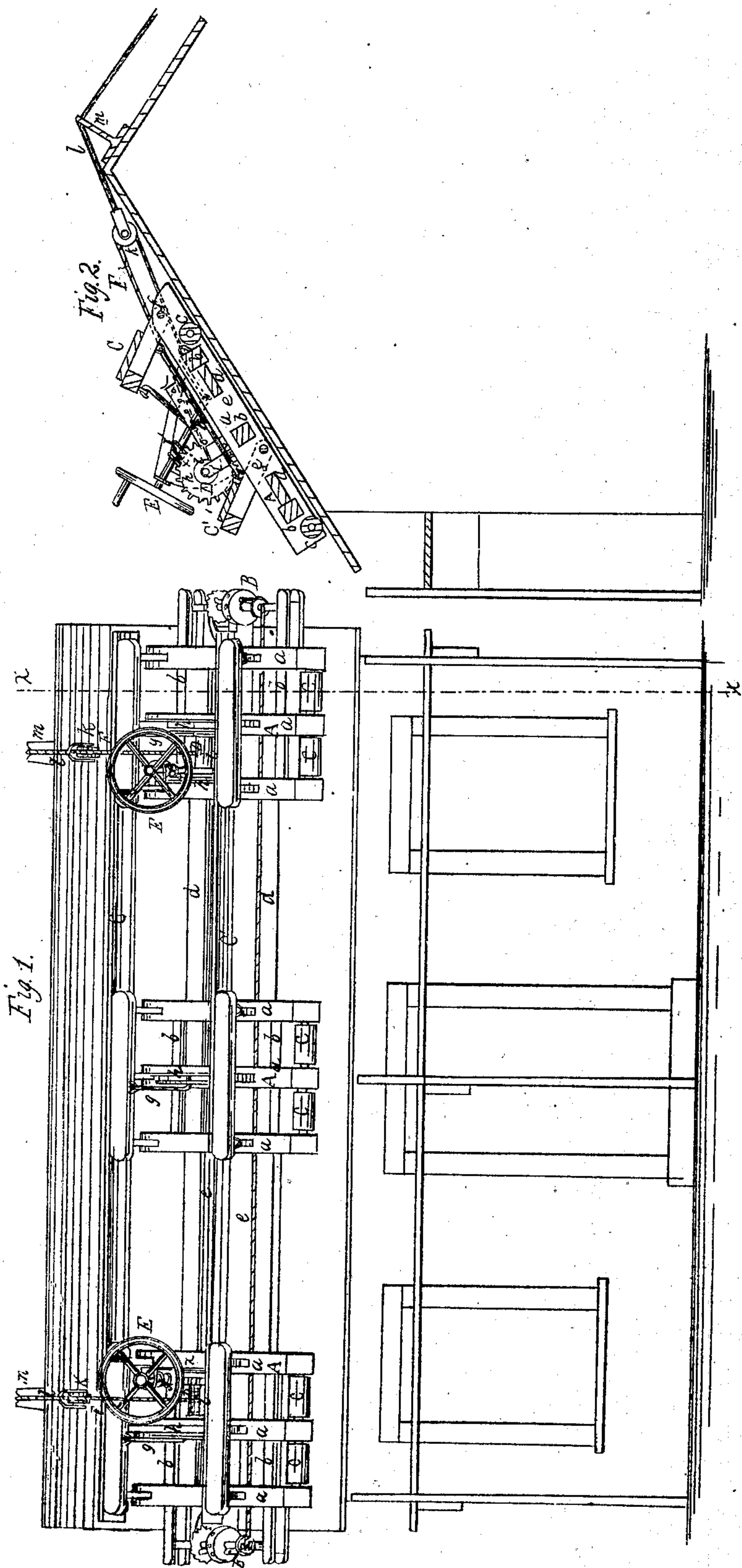


H. Wood Staging-Frame.

N^o 74472

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Witnesses

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per

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HORACE WOOD, OF LEVERETT, MASSACHUSETTS.

Letters Patent No. 74,472, dated February 11, 1868.

IMPROVED STAGING-FRAME.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HORACE WOOD, of Leverett, in the county of Franklin, and State of Massachusetts, have invented a new and improved Staging-Frame; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

This invention relates to a new and improved staging-frame, designed to facilitate the application of covering-materials to the pitch-roofs of buildings.

The invention consists of a framing, constructed in a novel manner, and provided with windlasses operated in a novel way, all arranged as hereinafter fully shown and described, whereby the staging-frame may, with the greatest facility and safety, be raised from the eaves to the peak of the roof, and lowered from the peak to the eaves by workmen on the staging-frame. In the accompanying sheet of drawings—

Figure 1 is an elevation of a building having my improvement applied to it.

Figure 2, a transverse vertical section of the same, taken in the line *x x*, fig. 1.

Similar letters of reference indicate corresponding parts.

A represents three rectangular frames, each composed of three or more parallel bars, *a*, connected or secured at a suitable distance apart by transverse bars *b*. In the front and rear end of these frames there are inserted rollers, *c*, and the several frames are connected by planks or slats, *d*, which pass through mortises in the bars *a* of the frame A. If the staging-frame is constructed for a narrow roof, the planks or slats *d* may be obtained long enough to extend the whole width, but in the generality of cases more than one length of plank or slat will be required, and their joints are in the central frame A, in the central bar *a* thereof, and are held together by cords or chains, *e*, the ends of which are connected by windlasses, B, at the outer sides of the end-frames A A. By means of these windlasses the cords or chains *e* may be strained perfectly taut, and the planks or slats *d* prevented from separating longitudinally, and the whole staging therefore kept firmly together. The staging-frame is provided with the platform C C', one, C, at its upper, and the other, C', at its lower end. These platforms extend the whole length of the staging-frame, and the upper one is connected at its front edge to the frames A by joints *f*, and supported at its rear edge by brace-rods *g*, which are fitted in any of a series of holes in plates *h*, attached to the frame A. By adjusting these brace-rods *g*, the platform C may always have a horizontal or nearly horizontal position, whatever the angle of the inclination of the roof may be. This will be fully understood by referring to fig. 2. The lower platform C' may be similarly arranged.

On the end-frames A of the staging-frame there are windlasses, D, which are operated by a screw and worm-wheel gear, (see fig. 2,) in which *k** is a worm-wheel on the drum *i* of the windlass, and *j* the screw which gears into the worm-wheel, the screw-shaft being provided with a hand-wheel, E, on its outer end. The ropes F of these windlasses pass around pulleys *k*, one end of said ropes being attached to the frames A, on which the windlasses are secured.

The pulleys *k* are attached to ropes *l l*, which pass over brackets *m m*, at or near the peak of the roof, and extend down to the sill or foundation of the building, where they are secured in any proper manner.

From the above description it will be seen that the operators on the frame may raise and lower the same by turning the windlasses B, and, owing to the screw and worm-wheel gearing, by which the windlasses are turned, the latter cannot be casually turned under the weight or gravity of the staging-frame, and the persons upon it. The device, therefore, is rendered perfectly safe, as no adjustment of pawls or other parts is necessary to hold the staging-frame, as is the case with other devices for the same purpose, and which is the cause of so many accidents, owing to a neglect in adjusting said pawls or parts.

My improved staging-frame possesses the advantage of being capable of adaptation to roofs of any width. The rollers *c* admit of the staging-frame moving readily, or with but little friction, up or down on the roof.

I claim as new, and desire to secure by Letters Patent—

1. A staging-frame, composed of a series of frames A, connected by planks or slats *d*, and provided with windlasses B and cords or chains *e*, all arranged substantially in the manner as and for the purpose set forth.
2. The windlasses D, applied to two or more frames A, operated by the screw and worm-wheel gear, and provided with ropes F, which pass through pulleys *k*, attached to fixed ropes *l*, substantially as and for the purpose specified.

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Witnesses:

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