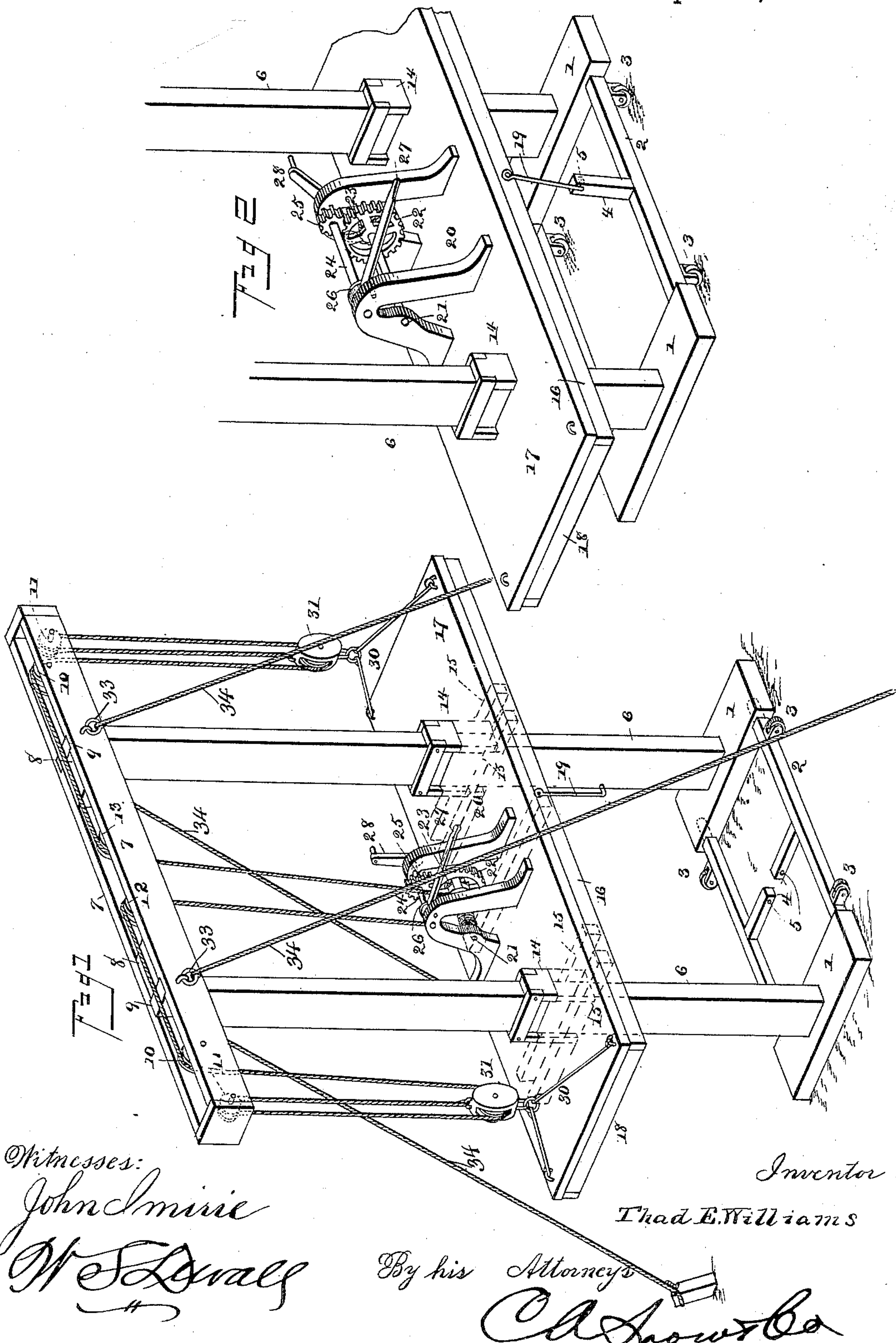


(No Model.)

T. E. WILLIAMS.
SCAFFOLD.

No. 411,363.

Patented Sept. 17, 1889.



Witnesses:

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UNITED STATES PATENT OFFICE.

THADDEUS EUGENE WILLIAMS, OF CARMEL, TENNESSEE.

SCAFFOLD.

SPECIFICATION forming part of Letters Patent No. 411,363, dated September 17, 1889.

Application filed May 7, 1889. Serial No. 309,866. (No model.)

To all whom it may concern:

Be it known that I, THADDEUS EUGENE WILLIAMS, a citizen of the United States, residing at Carmel, in the county of Montgomery and State of Tennessee, have invented a new and useful Scaffold, of which the following is a specification.

This invention has relation to scaffolds adapted for use by painters, bricklayers, and other mechanics.

Among the objects in view are to provide a scaffold of light and simple construction and consisting of as few parts as possible, which is adjustable vertically to different heights, and which is adapted for shifting from one place to another.

With these general objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 represents a perspective of a scaffolding constructed in accordance with my invention; and Fig. 2 is a detail in perspective of the lower portion or base, the same being connected with the platform and in position for shifting.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 1 represent opposite transverse sills, in the ends of which and extending from one sill to the other are mounted pivotally longitudinal caster-bars 2, provided near each end with ordinary casters 3. An arm 4 projects from the opposite surface of each of the caster-bars and are perforated at their ends, as at 5.

From about the center of each of the sills 1 rise vertical standards 6, which are connected at their upper ends by oppositely-arranged longitudinal cross-bars 7, spaced apart by space-blocks 8, and into said space the upper ends of said standards take and are secured, for which purpose the standard ends are preferably tenoned, as at 9. At the sides of the standards, and between said sides and the ends of the bars 7, there are journaled between the same loose pulleys 10 and 11, and between the two standards and in the bars 7 there are journaled opposite pulleys 12 and 13.

Upon each of the standards there are

mounted sliding boxes or frames 14, to which are secured transverse bars 15, which, together with similar bars 15, intermediate the bars first mentioned, connect the side frames 16 of the platform 17. The ends of the frames 16 are provided with connecting-bars 18, and over the frame thus constructed is the platform mentioned.

Depending from the center of the side frames 16 are loosely-swiveled hooks 19, the purpose of which will be hereinafter apparent.

Upon the platform 17, and intermediate the two standards 6, are mounted opposite standards 20, in which is journaled a drum-shaft 21, carrying a gear 22, having on its face a ratchet and pawl 23, and a power-shaft 24, carrying a small gear 25, which meshes with the gear 22 on the drum-shaft. A brake-pulley 26 is mounted at the opposite end of the shaft 24, over which is adapted to take a brake-lever 27, which is pivoted to the standard 20 at that end of the shaft, the shaft being operated by the usual operating-crank 28, affixed to the power-shaft.

To each of the corners of the platform are swiveled or otherwise loosely connected rods 30, which terminate in eyes for connection with a block-pulley 31.

The terminals of two ropes or cables are connected with the drum-shaft, and are carried up vertically and one passed to the right over the pulley 12 and the other over the pulley 13. The one passing over the pulley 12 is carried to the left, and the one over the pulley 13 to the right, and each over the pulleys 10 and downwardly and through the pulleys in the block 31, thence upwardly over the outer edge of the pulleys 11, and again downwardly and secured to the upper end of the block-pulleys. By this arrangement of block and tackle and the winding mechanism the least amount of power is required to raise and lower the platform with the load thereon.

If desired, I may locate the winding mechanism below the platform and between the sills 1 and have the cables extend through the same; but this I deem the better construction and so prefer it, as shown.

From the faces of the beams 7, and opposite the intersection of the upright 6, I secure

rings 33, through which may be passed ordinary guy-ropes 34, to steady the structure as a whole, the opposite ends of the ropes being connected to pegs driven in the ground, 5 or any other object.

The normal position of the bars 3 is with the casters out of contact with the ground and the arms 4 in the position in line with the casters—namely flat. By this construction I secure the advantages of having casters, 10 and thereby rendering the scaffolding capable of easy shifting, and yet secure for the scaffolding when in use a substantial and stable base, as the sides of the bars 2 will be 15 in the same plane as the under surface of the sills 1, thus supporting the scaffolding at the four sides.

When it is desired to carry the scaffolding from one point to a point at a considerable 20 distance where work is to be accomplished, the same may be carried upon an ordinary truck; but for the purpose of shifting the scaffolding short distances, as from one side of a house to another, the casters 25 only are used, and in the following manner: The platform is lowered until the hooks 19 can be engaged with the openings 5 in the outwardly-disposed arms 4. The drum is then revolved and the platform elevated, and the 30 arms 4 drawn to a vertical position, bringing the casters upon the ground and under the base, and raising the entire structure upon the casters. The scaffolding may now be pushed from point to point with the greatest 35 convenience.

Having described my invention, what I claim is—

1. In a scaffolding, the combination, with rotatable caster-bars, of a platform adapted for

connection with the bars and means for raising the platform to rotate the bars, substantially as specified. 40

2. In a scaffolding, the combination, with rotatable caster-bars provided with laterally-disposed bars having perforations, of the 45 platform provided with hooks for connection with the bars and means for raising the platform, substantially as specified.

3. The combination, with opposite sills having uprights and connected at their ends 50 by pivotal caster-bars having laterally-disposed arms perforated near their ends, of a platform mounted on the standards and provided with opposite depending hooks designed to engage with the perforated arms, 55 and means, substantially as described, for raising the platform.

4. The combination, with the uprights 6 and the sills 1, and the oppositely-located bars 7, spaced as at 8, and carrying the pulleys 10, 60 12, 11, and 13, of the boxing 14, having the bars 15 and the side bars 16, the opposite connecting-links 30, and the blocks 31, the standards 20, and the shaft 21, carrying the gear 22 and ratchet and pawl 23, the shaft 24, mounted 65 above the same and carrying a small gear 25, meshing with the gear 22, the brake-pulley 26 and its lever 27, and the cables connected to the drum-shaft and over the pulleys, as described, and each terminating at and connected to the blocks 31. 70

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THADDEUS EUGENE WILLIAMS.

Witnesses:

A. J. JONES,

H. C. LEWIS.