(No Model.)

E. B. STEELE.

ADJUSTABLE DERRICK.

No. 402,201. Patented Apr. 30, 1889.

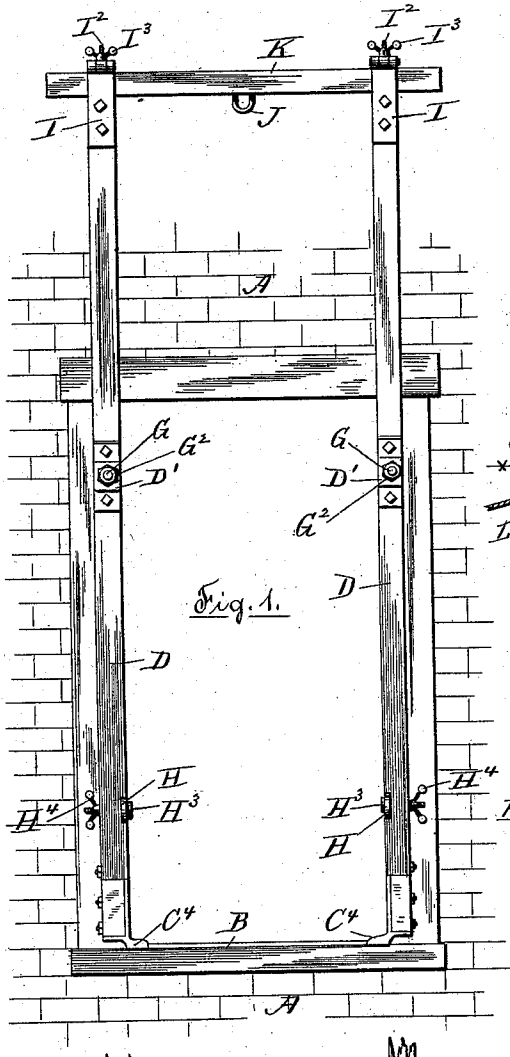


Fig. 1.

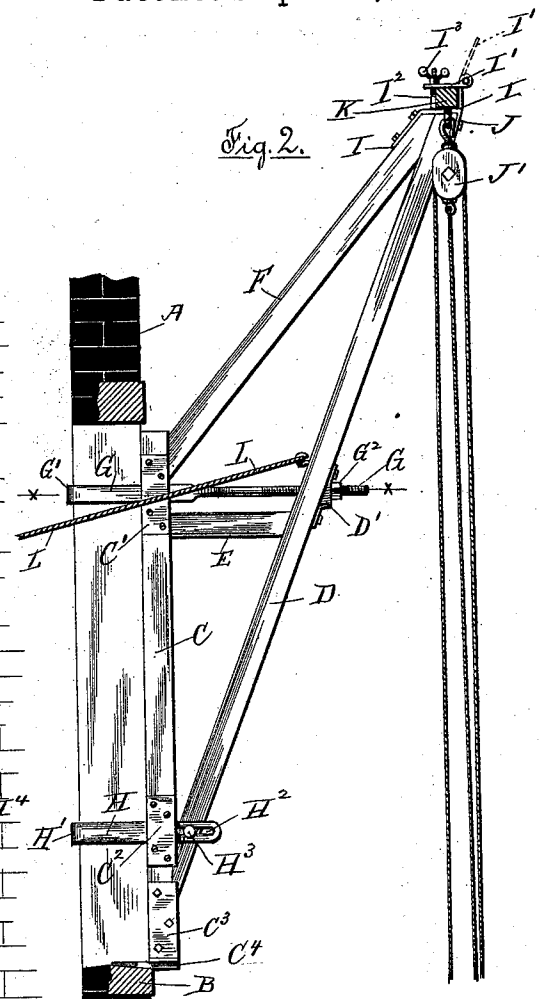


Fig. 2.

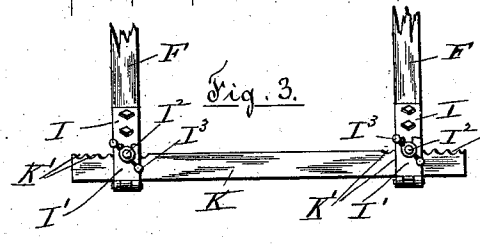


Fig. 3.

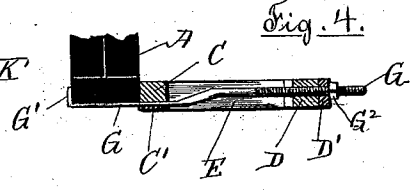


Fig. 4.

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UNITED STATES PATENT OFFICE.

EDWIN B. STEELE, OF ADRIAN, MICHIGAN.

ADJUSTABLE DERRICK.

SPECIFICATION forming part of Letters Patent No. 402,201, dated April 30, 1889.

Application filed November 5, 1888. Serial No. 290,060. (No model.)

To all whom it may concern:

Be it known that I, EDWIN B. STEELE, a citizen of the United States, residing at Adrian, in the county of Lenawee and State of Michigan, have invented certain new and useful Improvements in Adjustable Derricks, of which the following, in connection with the accompanying drawings, is a specification sufficiently clear to enable those skilled in the art to which my invention belongs to make and use the same.

My invention relates particularly to derricks which are adapted to be secured in the frames of windows or doors of buildings, and has for its object to provide a simple and cheap device which can be readily adjusted to any width of window or door, as will be fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 represents a front view of a building having my improved derrick in place in the window-opening. Fig. 2 is a vertical central section of Fig. 1. Fig. 3 is a top view of a portion of the derrick, illustrating the bar by which the proper distance between the trusses or "sections" is maintained; and Fig. 4 is a horizontal section on line *x x*, Fig. 2.

A represents the outside wall of a building having window-openings, with the sill B, on which my improved derrick is supported. The latter consists, substantially, of the upright posts C, the braces D and F, and the tie-beam E, all jointed and firmly secured to each other by suitable means. To the lower end of the post C is attached a shoe, C^4, which finds a bearing on the window-sill B and serves as the main support for the derrick-section. At the upper end of the post C, I provide a slide, G, which is flattened at its rear portion, in order to slide between the post C and the holding-plate C′, and which at its rear extremity is bent so as to form a hook, G′, adapted to rest against the inside of the wall or window, while its outer end is in the form of a bolt, and projects through the brace D centrally, and is provided with a nut, G^2, which screws up against the washer-plate D′. By this construction I am enabled to adapt my derrick to any width of wall, as by merely turning the nut G^2, I can slide the bolt back far enough to allow the rear hooked end of the same to take a grip on the inner edge of the wall, and thus hold the section firmly at its upper portion, while the lower end rests with the shoe C^4 on the sill B. In order to retain the lower end in proper position on the sill B, I provide an additional slide, H, having a rear hooked portion, and having at its forward end a slot, H^2, through which the bolt H^3 passes, and is clamped in position by means of the thumb-nut H^4. (See Fig. 1.) Similarly to the bolt G, I hold the slide H in place by a holding-plate, C^2, as shown in Fig. 2.

The parts so far described form a section of the derrick, one section being intended for each side of the window or door opening, and each being adapted to be secured in place independently of the other, as will be clearly understood.

At the top of the sections and at proper distance from the wall I place a bracket, I, having a retaining-plate, I′, hinged at its front upper end, and a bolt, I^2, extending through said hinged plate I′ and provided with a thumb-nut, I^3, to secure the plate I′. Within the openings formed by the bracket I, plate I′, and bolt I^2, I place the bar K, which is provided with notches K′ K′ to receive the bolts I^2, and when secured to the brackets I, by means of the plate I′ being screwed tight unto the bar K, a firm and uniform distance between the sections will be maintained, while at the same time the sections are prevented from swaying on account of friction between the plates I′ and the bar K. About midway between the ends of the bar K is provided an eyebolt or hook, J, from which a pulley-tackle, J′, or any other desired device may be suspended. (See Fig. 2.)

If a heavy load is to be lifted and the walls of the buildings should not be strong enough to sustain the weight on the bar K, a safety-rope, L, may be secured to the main brace D at one end, while the other end may be secured to the flooring or other stationary article by means of eyebolts or other suitable means. It will thus be readily seen that the strain would be taken off from the bolts G and the outer wall and transferred to a firmer base.

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

1. The combination of a frame comprising an upright post adapted to rest against the outside of the wall and inclined braces connected at their upper ends to each other and attached at their lower ends to the upper and lower parts, respectively, of said post, horizontal slides adjustable in said frame and provided with hooks at their inner ends for engaging the wall, and bolts having nuts for adjusting said slides.

2. The combination of an upright post provided with a sill-shoe, inclined braces connected at their upper ends to each other and attached at their lower ends to the upper and lower parts, respectively, of said post, a horizontal slide near the upper end of said post provided with a hook at its inner end for engaging the wall and a bolt-shaped outer end extending through the outer brace, a washer on the outer brace, and a nut on said bolt end for adjusting the slide.

3. The combination of an upright post, inclined braces connected at their upper ends to each other and attached at their lower ends to the upper and lower parts, respectively, of said post, a horizontal slide near the upper end of said post provided with a hook at its inner end for engaging the wall and with a bolt-shaped outer end extending through the outer brace, a washer on the outer brace and a nut on said bolt end for adjusting the slide, and an adjustable horizontal slide near the lower end of said post provided with a hook at its inner end.

4. The combination of an upright post, inclined braces connected at their upper ends to each other and attached at their lower ends to the upper and lower parts, respectively, of said post, a horizontal slide near the upper end of said post provided with a hook at its inner end for engaging the wall and with a bolt-shaped outer end extending through the outer brace, a washer on the outer brace, a nut on said bolt for adjusting the slide, an adjustable horizontal slide near the lower end of said post provided with a hook at its inner end and a slot at its outer end, a bolt extending through said slot and through the lower end of said outer brace, and a thumb-nut on said bolt.

5. The combination of two adjustable window derrick-sections adapted to be secured to the wall of a building, a cross-bar provided with notches near its ends, and bolts in said sections engaging said notches for securing the bar and sections together.

6. The combination of two adjustable window-derrick sections adapted to be secured to the wall of a building and provided with brackets having hinged plates, a bar for connecting said sections resting in said brackets and provided with notches near its opposite ends, and bolts passing through said hinged plates, notches, and brackets, substantially as described.

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Witnesses:
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