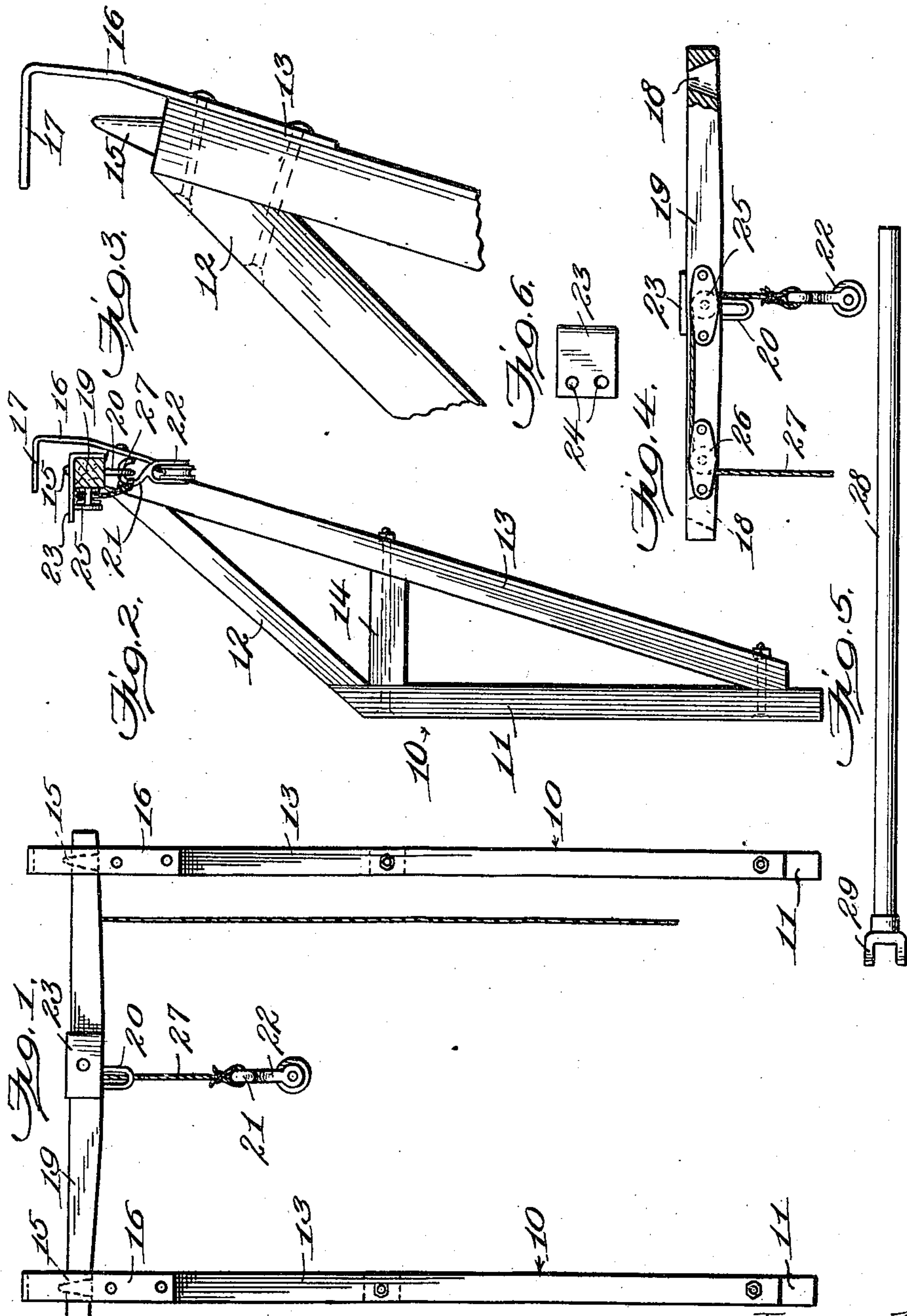


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O. C. SOALES, ADMINISTRATOR.
ADJUSTABLE DERRICK.
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975,505.

Patented Nov. 15, 1910.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE W. BROWN, OF SOMERVILLE, MASSACHUSETTS; OTTO C. SCALES, ADMINISTRATOR OF SAID BROWN, DECEASED, ASSIGNOR TO WILLIAM H. BREEN, OF BOSTON, MASSACHUSETTS.

ADJUSTABLE DERRICK.

975,505.

Specification of Letters Patent. Patented Nov. 15, 1910.

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To all whom it may concern:

Be it known that I, GEORGE W. BROWN, a citizen of the United States, residing at Somerville, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Adjustable Derricks, of which the following is a specification.

My present invention relates to that class of derricks which are adjustable to windows and the like for use when hoisting pianos, safes and such heavy articles and my object is to provide an improved construction whereby to eliminate as far as possible, the danger incident to the setting up of this class of derrick, for instance the placing of the cross-beam over and between the side trusses, and the placing of the hoisting block in its hanger.

To this end my invention resides in the following features of construction arrangement and operation, reference being made in this description, to the accompanying drawing, in which,—

Figure 1 is a front elevation of my improved derrick complete. Fig. 2 is a central vertical section transversely thereof. Fig. 3 is an enlarged detail elevation of the upper end of one of the trusses. Fig. 4 is an inner face view of the cross-beam, removed, and, Fig. 5 is a view of the cross-beam hoisting pole. Fig. 6 is a plan view of the plate.

Referring now to these figures my derrick embodies side trusses 10 which are secured to the side casings of a window frame, one upon each side of the window, by any suitable means (not shown). These trusses comprise vertical beams 11 from the upper and lower ends of which rise diagonal beams 12 and 13 respectively, meeting and secured together at their outer ends, beam 13 being braced by a beam 14 from beam 11. The upper ends of the beams 12 and 13 of each truss have secured therein and extending upwardly therefrom a tapering pin 15, and beams 13 have secured upon their outer surfaces an upwardly projecting guard plate 16 extending some distance above the pin 15 and provided with an intumed angular extremity 17 overlying said pin.

The truss pins 15 project through the conformable transverse openings 18 in the tapering ends of a cross-beam 19 when the latter is in position thereon of its own weight and guarded by plates 16. This cross-beam 19 has a central depending U-shaped hanger 20 to receive the hook 21 of the hoisting block 22, and is provided upon its upper surface above said hanger with a plate 23 having an overhanging portion provided with a pair of spaced openings 24. The cross-beam 19 has also a pair of pulleys 25 and 26 secured to its inner surface, the inner one 25 being directly over hanger 20, over which pulleys is trained a rope 27, the inner end of which is formed with a loop about the hook 21 of block 22, and the outer end of which is free.

Thus in setting up my improved derrick, after the trusses 10 have been secured upon the window casing, it is only necessary to place the cross-beam 19 upon the truss beams 12 adjacent the window. A pole 28 having a forked tip 29 is then placed with its forks entering the openings 24 of plate 23 and the cross-beam is pushed upwardly along the beams 12 and raised so that it drops down upon the pins 15. After this the outer end of rope 27 is pulled, drawing the block 22 upwardly until its hook 21 catches into the beam hanger 20. It was formerly necessary for the operator to climb out upon the trusses and lift the heavy beam and block in place, and as this is a very hazardous operation, much advantage arises from its elimination.

I claim:

1. The combination in a derrick of the character described, of a pair of side trusses, embodying inclined risers having upwardly projecting pins at their ends, a cross-beam having openings therethrough adjacent its ends to receive said pins, and guard plates secured to said trusses adjacent the pins and having portions overlying the same.

2. The combination in a derrick of the character described, of a pair of side trusses embodying inclined risers, a cross-beam having an intermediate apertured plate, means to interlockingly engage portions of said

risers at the ends thereof, and a pole having a forked tip to engage said plate and force said cross beam upwardly upon said risers.

3. The combination in a derrick of the
5 character described, of a cross-beam having a central depending block hanger, a block having a hook to engage said hanger, a pair of pulleys mounted upon said cross-beam, one of said pulleys being immediately adja-

cent said hanger, and a rope trained over 10 said pulley and having one end looped about said block hook.

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

GEORGE W. BROWN.

Witnesses:

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