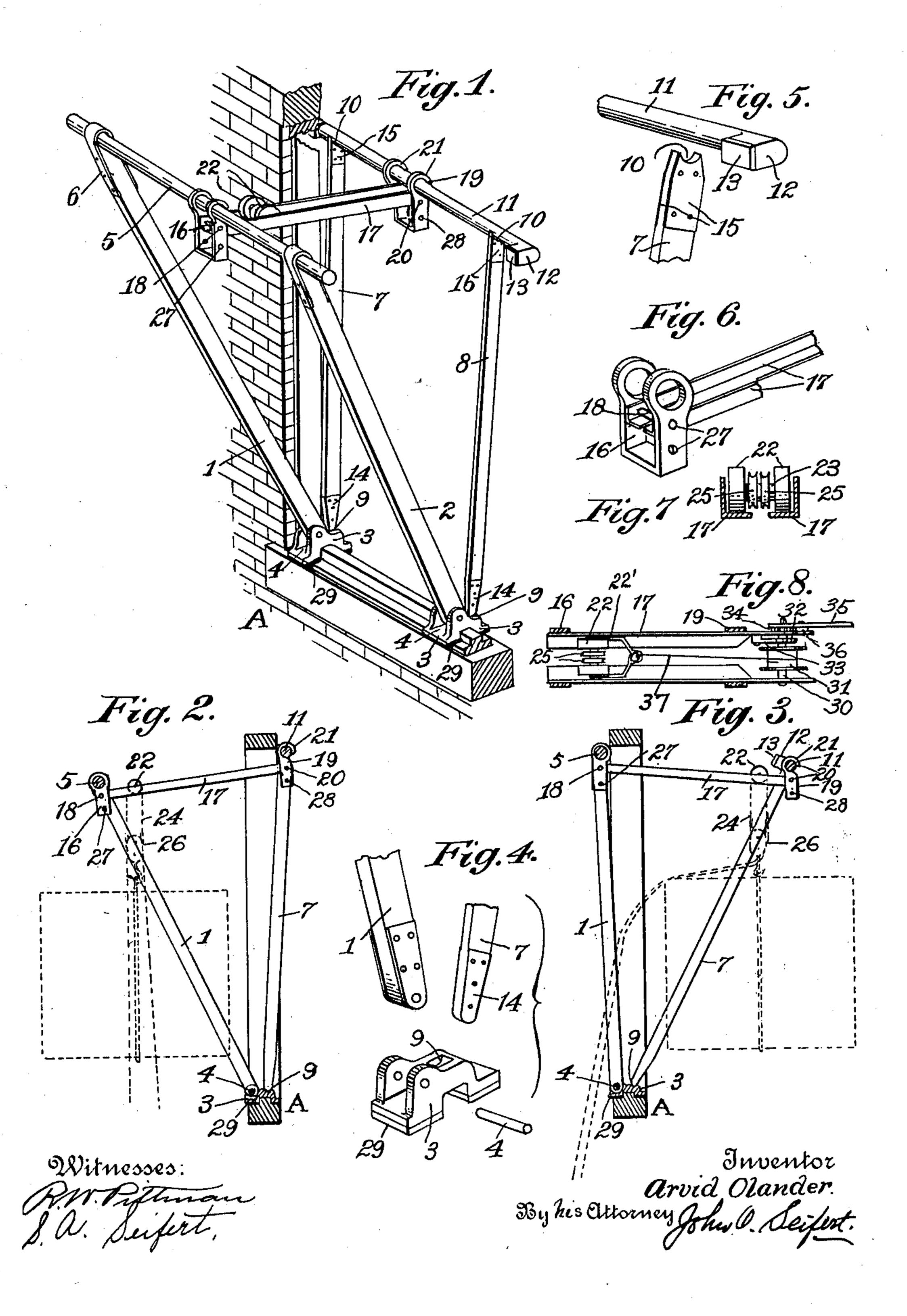
## A. OLANDER. HOISTING RIGGING. APPLICATION FILED AUG. 15, 1910.

980,330.

Patented Jan. 3, 1911.



## UNITED STATES PATENT OFFICE.

ARVID OLANDER, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, OF ONE-HALF TO CHARLES SMITH, OF BROOKLYN, NEW YORK.

## HOISTING-RIGGING.

980,330.

Specification of Letters Patent.

Patented Jan. 3, 1911.

Application filed August 15, 1910. Serial No. 577,364.

To all whom it may concern:

Be it known that I, Arvid Olander, a citizen of the United States, residing in the borough of Brooklyn, county of Kings, city and State of New York, have invented new and useful Improvements in Hoisting-Riggings, of which the following is a specification.

This invention relates to knock down or portable hoisting riggings, and it is the object of the invention to provide a rigging of this character that is simple in construction and cheap in manufacture, and which may be readily applied to a window casing in order that heavy articles, such as pianos, safes and the like, may be hoisted as from the street, and then passed through the window and lowered to the floor of a building without the use of skids or the like.

In accordance with the present invention I provide two pairs of stanchions with a releasably connecting bar passing through the upper ends of each pair of stanchions, a tackle carrying track being connected to and carried by said bars, the lower ends of the stanchions being supported upon the window sill so that the rigging may have a limited rocking movement in and out of the window casing.

In the drawings accompanying and forming a part of this specification Figure 1 is a perspective view of my improved hoisting rigging in operative position in a window casing, only enough of said casing being shown for a clear understanding of the application of the device to the same. Fig. 2 is a sectional side elevation illustrating an article being hoisted from outside of the window. Fig. 3 is a view similar to Fig. 2

but showing the rigging as having been rocked and the tackle carriage as having ridden to the inner end of the track so that the article has been passed through the window casing and in position to be lowered.

a stanchion supporting shoe and a portion of one of each pair of stanchions. Fig. 5 is a disassembled view in perspective of a portion of one of the stanchions and its contion of the stanchions and its continuous bere for a detail perspective.

view of one of the track carriers and a portion of the track. Fig. 7 is a detail view of the tackle carriage in position on the track, the said track being shown in section. Fig. 8 is a plan view of the track the stanchions

being shown in section, illustrating means for drawing the tackle carriage along the track.

Similar characters of reference designate like parts throughout the different views of 60 the drawings.

The hoisting rigging may be applied to a window casing (designated in a general way by A) of any construction or dimensions, and comprises a pair of stanchions 1, 2, 65 made of any suitable material, such as wood or metal, and pivotally supported at their lower ends in shoes 3, 3, which rest upon the sill of the window, as by means of pivot pins 4, said stanchions projecting upwardly 70 outside of the window casing, and at their upper ends connected by a bar 5 passing through holes in said stanchions, and when made of wood preferably re-inforced by metal pieces 6 passing around the upper ends 75 thereof. A second pair of stanchions 7, 8, made of any suitable material such as wood or metal, are supported at their lower ends for rocking movement in sockets 9 in the shoes 3, the said stanchions projecting up- 80 wardly inside of the window casing, the upper ends thereof being cut out, as at 10, and in which is seated a bar 11, the said bar being supported by said stanchions and also serving to connect the same. The bar 11 is 85 constructed at each end with flattened portions 12, which may be provided with a suitable pad 13, such as rubber or the like, to engage with the inner wall of the building, the pad 13 preventing any marring or break- 90 ing of said wall. When the stanchions 7, 8, are made of wood they may be provided with metal re-inforcing pieces 14, 15.

Secured to and supported by the bar 5 is a carrier 16 to which is adjustably connected one end of a pair of rails or track 17 by means of a pin 18 passing through said track carrier and the track. The other ends of said rails or tracks are adjustably connected to a carrier 19, as by means of a pin 20, the said carrier being provided with hookshaped members 21 to releasably engage over the bar 11. The said track 17 also serves to rigidly connect both pairs of stanchions at their upper ends in such a position so that one pair will be diverging outwardly from the other.

Mounted on the track 17 to have to and fro movement along the same is a tackle carriage comprising a pair of wheels 22 sup-110

ported upon a spindle or axle 23. The rails forming the track 17 are preferably made of angle iron so that the wheels of the tackle carriage may be disposed between the same, 5 the purpose of which will be hereinafter described. The tackle carriage may also serve as part of the tackle, and for this purpose I rotatively mount on the axle of the wheels 22 two or more sheaves or pulleys, 25, 25, as 10 shown in Figs. 7 and 8, around which is passed a rope 24, the said rope also being connected to a pulley block 26 of usual construction.

The operation of my hoisting rigging is 15 substantially as follows: Assuming that the rigging has been set up ready for hoisting an article from the outside of a building and to be passed through a window casing, the parts will be in the positions illustrated in 20 Fig. 1 with the stanchions 1, 2, projecting outwardly and upwardly from the window casing, the bar 11 supported upon the upper ends of the stanchions 7, 8, with the ends 12 bearing against the inner wall of the build-25 ing. After the article has been hoisted so that it will be in the position illustrated in dotted lines in Fig. 2, or clear the sill of the window casing, a slight inward pull upon the article will cause the wheels of the tackle 30 carriage with the article to ride along the rails or track 17, and as the carriage rides along the track the stanchions 1. 2 and 7, 8, will rock upon their lower ends so that the rigging will assume the positions shown in 35 Fig. 3 with the ends of the bar 5 engaging with the outer wall of the building, the tackle carriage having ridden along the track from the position shown in Fig. 2 to that shown in Fig. 3, and carrying with it 40 the article being hoisted, the said article then being in position to be lowered to the floor of the building.

To take down the rigging it is only necessary to unhook the track carrier 19 when 45 the bar 11 may be lifted off from the top of the stanchions 7, 8, and said stanchions lifted out of their seats in the shoes 3. The shoes are then removed from the window sill and with them the stanchions 1, 2, track 17 and 50 track carrier 16, and drawn through the window casing. It will be obvious that the rigging can be as readily put in place. Preferably the track-carriers 16, 19 are so constructed that the track may lie close to the 55 top of the window casing so as to permit of the free and easy passage of the article being hoisted through the window. For this purpose the track is made of angle iron and the wheels of the tackle carriage ride upon 60 the angle portion and between said track.

In order that the apparatus may be readily adjustable to window casings of different heights I preferably construct the carriers 16, 19 in the form of yoke-shaped members 65 and provide the arms of the yoke with two

or more pairs of axially alined holes 27, 28. Should it be found that the height of a window casing is not sufficient to accommodate the apparatus as set up in Fig. 1, the pins 18, 20 may be removed and the track 70 lowered to be supported by the pins in a pair of the lower holes.

The shoes 3, 3, are preferably provided with some suitable pad 29, such as rubber or the like, so that they will not mar or in- 75 jure the window sill. Furthermore, they may be adjustable so as to be adjustable to window sills of different form and width.

In Fig. 8 I have shown the apparatus provided with means to draw the tackle carriage with a load along the track 17, and is to be utilized when the forward end of the track is inclined downwardly, as shown in Fig. 2, and a heavy article, such as a safe, is being hoisted. For this purpose the inner 85 ends of the rails of the track are extended somewhat and has mounted therein for rotary movement a shaft or spindle 30 to which is secured a winding drum 31 to which is attached one end of a rope or cable 37, the 90 other end of which cable is fastened to a yoke shaped member 22' secured to the axle of the wheels 22 of the tackle carriage. When the article has been hoisted to the Fig. 2 position by applying a reciprocating mo- 95 tion to a handle 35 loosely mounted on the shaft 30 of the drum a pawl 36 pivotally connected to the handle and normally engaging with a ratchet wheel 34 fixed to the shaft 30 will cause the drum to revolve and wind 100 the cable thereon. During the backward movement of the handle the pawl will ride over said ratchet wheel, but the drum will be locked in its advanced position by means of a pawl 33 pivotally connected to one of 105 the rails and engaging with a ratchet wheel 32 fixed to the shaft 30 or drum 31.

Variations may be resorted to within the scope of the invention.

Having thus described my invention I 110 claim:

1. A hoisting rigging comprising two pairs of upwardly extending and outwardly diverging stanchions connected at their upper ends and having a rocking movement 115 upon their lower ends.

2. A hoisting rigging of the class specified, comprising a pair of stanchions the lower ends of which are adapted to rest upon a window sill, a bar extending between 120 the upper ends of said stanchions, a second pair of stanchions the lower ends of which also rest upon the window sill, a bar extending between the upper ends of said stanchions, and a track connected at each 125 end to one of said bars.

3. A hoisting rigging of the class specified, comprising a pair of stanchions the lower ends of which are adapted to rest upon a window sill, a bar extending between 130

the upper ends of said stanchions, a second pair of stanchions the lower ends of which also rest upon the window sill, a bar extending between the upper ends of said 5 stanchions, a track connected at each end to one of said bars, and a tackle carriage supported on said track for to and fro movement.

4. A hoisting rigging of the class speci-10 fied, comprising a pair of stanchions the lower ends of which are adapted to rest upon a window sill and extending upwardly outside of the window casing, a bar extending between the upper ends of and support-15 ed by said stanchions, a track carrier on said bar, a second pair of stanchions the lower ends of which also rest upon the window sill and extend upwardly inside of the window casing, a bar extending between the 20 upper ends of and supported by said stanchions, said bar provided at its ends with pads to engage with the walls, a track carrier releasably connected to said bar, and a track connected at each end to said track 25 carriers.

5. A hoisting rigging of the class specified, comprising a pair of stanchions, a bar extending between the upper ends of and supported by said stanchions, a second pair 30 of stanchions, a bar extending between the upper ends of and supported by said stanchions, a track connected at each end to said bars substantially midway thereof, and shoes to rest upon a window sill and in

which the lower ends of the stanchions are 35 supported for rocking movement.

6. A hoisting rigging of the class specified, comprising a pair of shoes resting upon a window sill, two pairs of stanchions the lower ends of which are supported in said 40 shoes, one pair extending upwardly outside of the window casing and the other pair extending upwardly inside of the window casing and both pairs diverging outwardly from each other at the upper ends, bars ex- 45 tending between the upper ends of and supported by each pair of stanchions, and a tackle carrying track connected to said bars; said stanchions supported in the shoes so that the track will have a rocking move- 50 ment in and out of the window casing.

7. A hoisting rigging comprising two pairs of upwardly extending and outwardly diverging stanchions; bars extending between the upper ends of and supported by 55 each pair of stanchions; a track connected to said bars; a tackle carriage having to and fro movement on said track; a winding drum rotatively carried by said track; a cable connected to the drum and tackle car- 60 riage; and means to rotate the drum to wind the cable thereon and cause the tackle car-

riage to run along the track.

## ARVID OLANDER.

Witnesses: WM. T. Avis, JOHN O. SEIFERT.