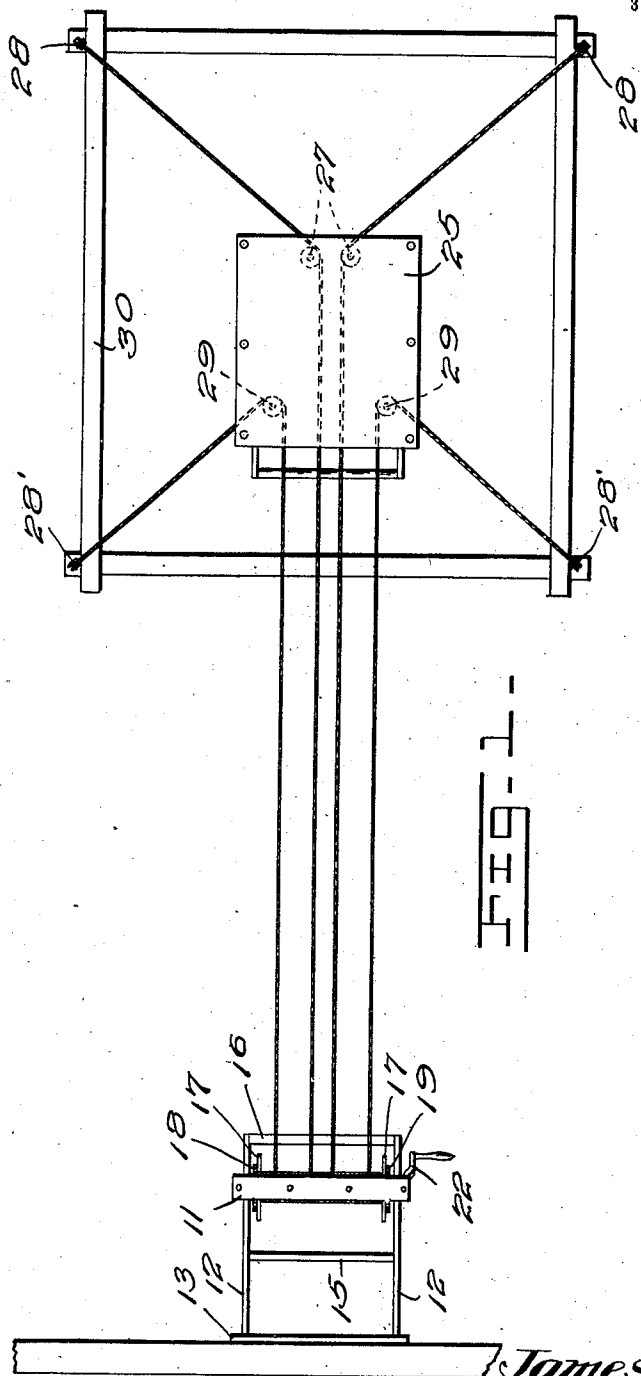


973,572.

J. L. SIMS.
HOISTING DEVICE.
APPLICATION FILED JUNE 18, 1910.

Patented Oct. 25, 1910.

3 SHEETS-SHEET 1.



Witnesses
J. L. Sims
J. E. Kunch

By *Nordward & Chandler*

Attorneys

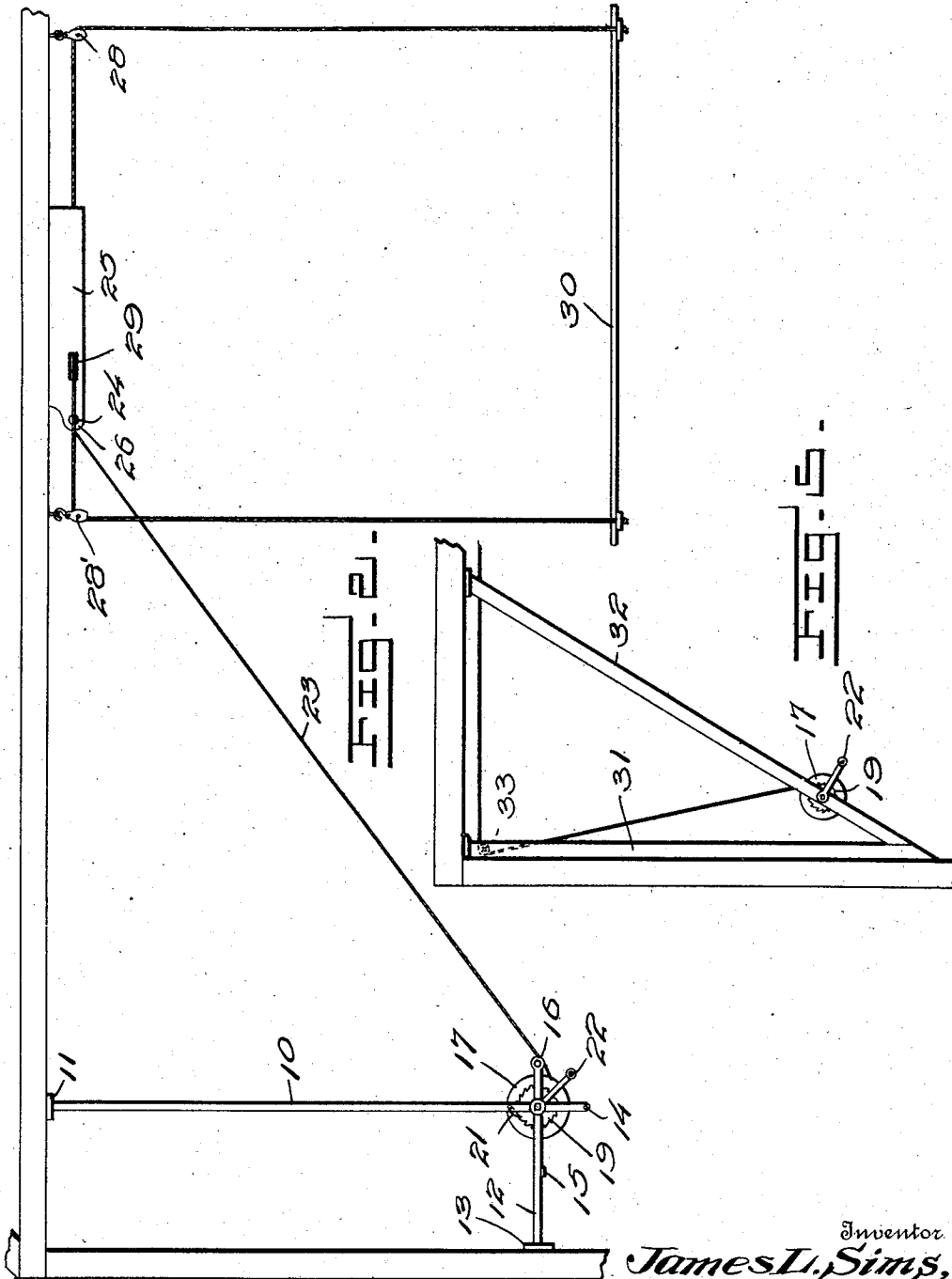
Inventor
James L. Sims,

J. L. SIMS.
HOISTING DEVICE.
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3 SHEETS—SHEET 2.



Witnesses
J. L. Sims
J. L. Sims

Inventor
James L. Sims,

By *Howard & Chandler.*

Attorneys

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3 SHEETS-SHEET 3.

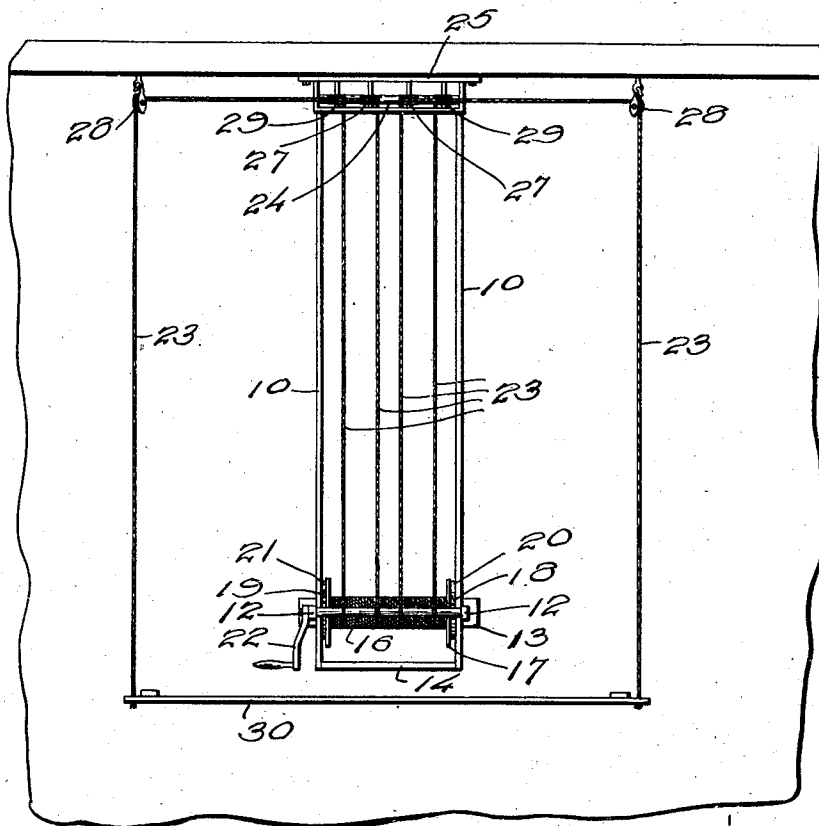


Fig. 3.

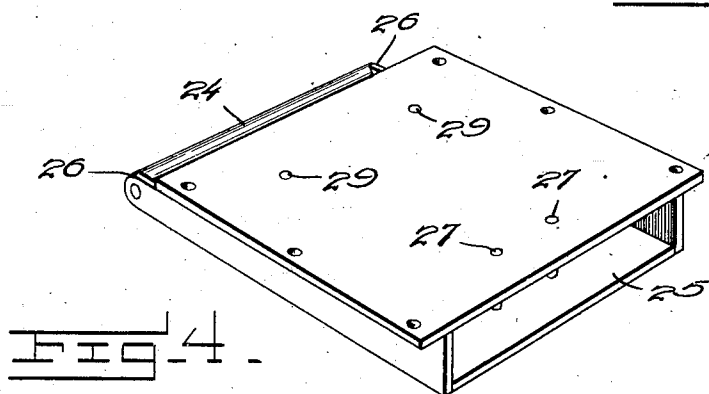


Fig. 4.

Witnesses
R. L. Armstrong
J. A. Church

Inventor
James L. Sims,

By *Woodward & Chandler*

Attorneys

UNITED STATES PATENT OFFICE.

JAMES L. SIMS, OF BEN WHEELER, TEXAS.

HOISTING DEVICE.

973,572.

Specification of Letters Patent.

Patented Oct. 25, 1910.

Application filed June 18, 1910. Serial No. 567,715.

To all whom it may concern:

Be it known that I, JAMES L. SIMS, a citizen of the United States, residing at Ben Wheeler, in the county of Van Zandt and State of Texas, have invented certain new and useful Improvements in Hoisting Devices, of which the following is a specification.

This invention relates to combined hoisting devices and the primary object of the invention is to provide a novel apparatus of this character which may be used as a quilting frame or a wagon body hoister or the like.

A further object is to provide a novel arrangement of pulleys for the hoisting ropes, whereby a minimum length of rope is required and so that the amount of pull necessary to raise the frame or wagon body will be greatly decreased.

A still further object is to provide a novel junction box for the ropes, whereby the strain thereon from the hoisting apparatus will be equalized.

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings: Figure 1 is a top plan view of my improved apparatus in operative position, Fig. 2 is a side view thereof, Fig. 3 is an end view thereof, Fig. 4 is a detail perspective view of the junction box, Fig. 5 is a side elevation of a slightly modified form of the apparatus.

Referring to the drawings in detail the numeral 10 designates a rectangular frame which is suspended from the ceiling or top of the barn by means of a cross bar 11 and 12 designates a similarly constructed frame but which is secured to the vertical wall of the structure by means of a horizontal bar 13 and as is clearly seen in the drawings, said frames meet each other at right angles and have their outer ends extended therebeyond. The vertical frame 10 is secured at its lower end by a brace rod 14 while the horizontal frame 12 is braced by a cross rod 15 intermediate of its length and said horizontal frame has a roller 16 journaled at its outer end.

Rotatably mounted upon the frames at their meeting points is the drum 17 which

is provided with ratchet wheels 18 and 19 upon each end having oppositely disposed teeth adapted to be engaged by the dogs 20 and 21 respectively, a crank handle 22 being carried by one end of the drum for imparting rotation thereto, the ratchet wheels being provided to hold the drum at any desired point during its rotation. Secured to the drum and adapted to be wound thereon are four hoisting ropes 23 which are passed under the roller 16 and are extended upwardly and over a friction roller 24 carried by a rectangular junction box 25 mounted upon the ceiling.

The junction box 25 comprises a rectangular structure having the arms 26 projecting beyond one end thereof and upon which the roller 24 is rotatably mounted, pulleys 27 being rotatably carried at the opposite end of the box and positioned for engagement with the inner pair of the hoisting ropes 23 which are extended outwardly therefrom and pass around pulleys 28 carried by the ceiling and depending therefrom as for a purpose to be subsequently described. The outer pair of the ropes 23 are extended around the pulleys 29 disposed adjacent the sides of the box and mounted in a similar manner to the pulleys 27 at the opposite open end thereof, said outer pair of ropes being disposed around the pulleys 28' also carried by the ceiling and depending therefrom. Secured at the lower ends of the depending portions of the hoisting ropes is a rectangular frame 30, which is especially constructed for use as a quilting frame but is rigid enough for elevating a wagon body or other drayage as desired.

In Fig. 5 of the drawings I have shown a slightly modified form of supporting frame for the drum which is especially adapted for use as a wagon body hoister or other heavy articles, and in this structure the arms 31 are suspended from the ceiling and are braced by means of the bracket members 32, the drum 17 being rotatably carried by said bracket members adjacent their lower ends and provided with the usual ratchet wheels, engaging dogs and the crank handle 22. The hoisting ropes are extended upwardly and over a roller 33 rotatably carried adjacent the upper ends of the arms 31 and then through the junction box in the manner already described.

From the foregoing description it will be apparent that the device will efficiently

serve the purposes of a quilting frame or wagon bed hoister and in view of its extreme simplicity may be applied to different sized structures without any change of the parts and in view of the novel arrangement of pulleys and ropes, less pull will be required for raising the frame to the proper position.

What is claimed is:

1. A hoisting apparatus comprising a frame, a drum rotatably carried thereby, means for rotating the drum, means for holding the drum in its adjusted position during its rotation, hoisting ropes secured to the drum, a roller carried by the frame around which said ropes are disposed, a junction box carried thereabove, a roller journaled in said box and over which said ropes pass, pulleys carried at each end of the box, certain of said ropes passing through the box and around the pulleys at the far end thereof, the other of said ropes being disposed around the other pulleys and through the box at the near end, pulleys around which said ropes pass and dependent

therefrom and a supporting frame carried by the depending ends of said ropes.

2. A hoisting apparatus comprising a rotatably supported drum, a junction box provided with open ends and apertures through opposite sides thereof, a pair of pulleys rotatable in the box at the far end thereof adjacent one open end, a second pair of pulleys similarly mounted adjacent the apertures, arms carried by the box, a roller journaled thereon, four hoisting ropes secured to the drum and disposed around said roller, said ropes being disposed around said pulleys, two of said ropes passing through the apertures, a supporting frame, said ropes being suspended from a ceiling and connected thereto, a crank handle for the drum and means for holding the drum at any position in its rotation.

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

JAMES L. SIMS.

Witnesses:

H. A. CASTLEBERRY,

J. D. STRINGER.