

Aug. 9, 1949.

L. TE DESCO
LOADING DEVICE

2,478,513

Filed Jan. 9, 1946

2 Sheets-Sheet 1

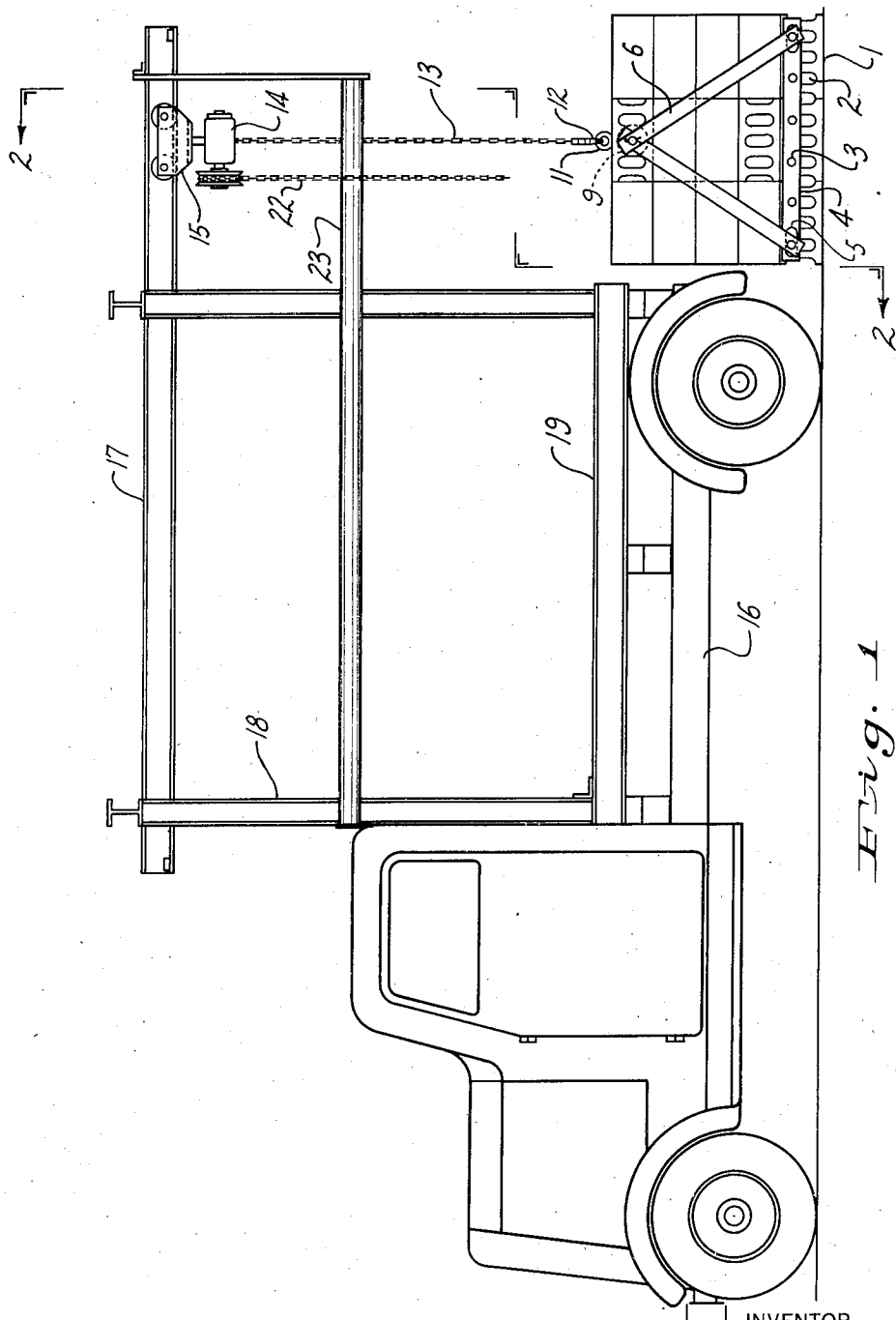


Fig. 1

INVENTOR
Lawrence Te Desco

BY
William B. Jaspert
ATTORNEY

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2 Sheets-Sheet 2

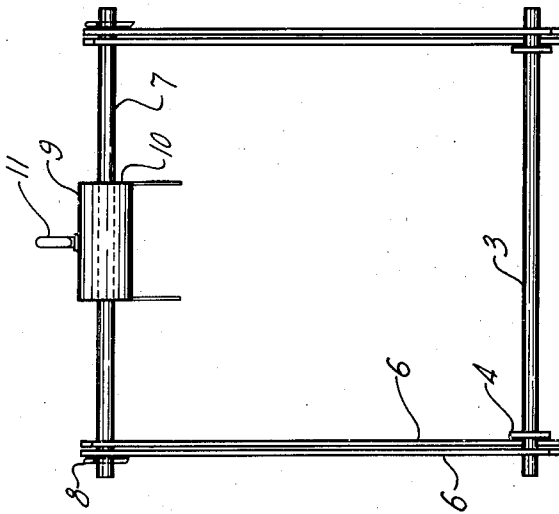


Fig. 3

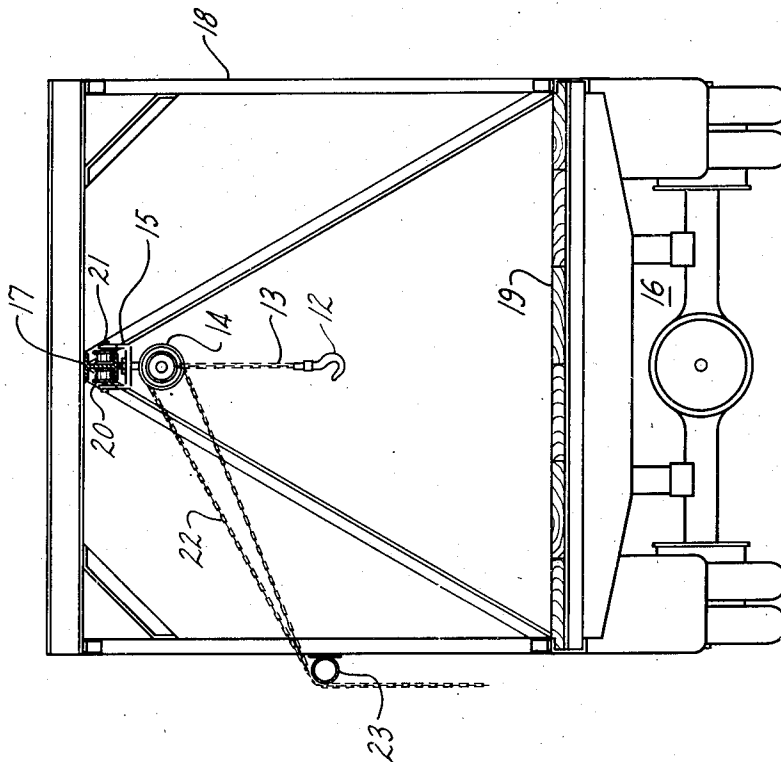


Fig. 2

INVENTOR
Lawrence Te Desco
BY
William B. Jaspert
ATTORNEY

UNITED STATES PATENT OFFICE

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LOADING DEVICE

Lawrence Te Desco, Frank, Pa.

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1 Claim. (Cl. 294—67)

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This invention relates to new and useful improvements in loading devices, more particularly to apparatus for lifting and loading building blocks such as hollow cinder blocks, and it is among the objects thereof to provide a novel form of lift for simultaneously handling a plurality of hollow building blocks which employs the blocks themselves for supporting and bracing a pile of blocks.

Another object of the invention is the provision of a trolley for the lift by means of which the pile of blocks may be loaded on a truck especially suited for hauling such blocks.

The invention further contemplates improvements in mechanical details for rendering such lift and trolley durable and simple in construction in the handling thereof.

The invention will become more apparent from a consideration of the accompanying drawings, constituting a part hereof, in which like reference characters designate like parts, and in which

Fig. 1 is a side elevational view of a combined truck and hoist embodying the principles of this invention;

Fig. 2 a rear elevation view taken along the line 2—2, Fig. 1; and

Fig. 3 a side elevational view of the lift for simultaneously hoisting a pile or plurality of stacked hollow building tile.

With reference to Figs. 1 and 3 of the drawings, the building blocks 1, having windows 2, are arranged in end-to-end relation, as shown in Fig. 1, and, similarly, in side-to-side relation for any number of blocks that is convenient to place on a truck, the blocks being lined up sideways with the windows 2 in register for receiving anchor rods 3, such the rod 3 shown in Fig. 3. There are three rows of blocks shown in Fig. 1 joined by cross links 4 having perforations for receiving the ends of the rods 3, and, as shown in Fig. 1, these perforations at the end of the links are in the form of elongated slots 5 to allow self-alignment of the links and cross rods 3. Suspension links 6 are connected to the end cross rods 3 as shown in Fig. 3 and are also connected with a rod 7 on which they are held by cotter keys 8, Fig. 3. A pivot sleeve 9 engages rod 7 by its end walls 10 and is provided with an eye 11 for receiving the hook 12 of a hoist chain 13, which is suspended from a pulley block 14 on a trolley carriage 15. By the arrangement of the bottom course of the window block with the rods 3 passing through each row of blocks and by utilizing the elongated slots 5 in the cross link 4, tension on the hoist will cause self-alignment of the rods 3, links 4, 55

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links 6 and the sleeve 9 to constitute the stacked tile a self-sustaining load.

Because of the size and weight of the stacked tile as shown in Fig. 1, means for hoisting the same on a vehicle, such as the truck generally designated by the numeral 16, Fig. 1, must be provided. For this purpose a track 17 is mounted on uprights 18 extending from the bed 19 of the truck, the track being an I-beam as shown in Fig. 2. The trolley 15 is provided with flanged wheels 20 which ride on the bottom flange of the I-beam, the wheels 20 being journaled on a pin 21 from which the pulley block 14 is suspended. The hoist chain 13 is raised or lowered by means of a hand chain 22 which is kept out of the way by means of a bar 23 extending on one side of the truck. When the operator manipulates the chain 22, the chain may, of course, be cleared from the bar 23, or it may be moved over the rounded contour of the bar 23 without a great deal of friction.

The operation of the foregoing hoisting and trolley apparatus is briefly as follows.

The blocks 1 are piled in the manner shown in Fig. 1 and the rods 3 are placed through the windows 2, as shown, with one or more rods 3 passing through one or more windows of each block of a row of blocks. The side link 4 is then slipped over the bars 3 and the hoist links 6 are likewise placed in position. With the lift thus constituted of the bottom layer of blocks and the cross rods 3 and hoist links, additional blocks are piled on the bottom layer, leaving a space in the center to provide clearance for the pivot sleeve 9 of the hoist. The hook 12 is then lowered to engage the eye link 11 and the entire rod is raised at the rear of the truck to clear the bed 19. It is then shoved forward on the track 17 and several of these stacked tile may be loaded on the truck without removing the hoist linkage. At the point of unloading the operation is reversed and the hoist mechanism removed from the stacked block. A single operator may load and unload the truck by means of the simple mechanism herein provided.

Although one embodiment of the invention has been herein illustrated and described, it will be evident to those skilled in the art that various modifications may be made in the details of construction without departing from the principles herein set forth.

I claim:

A lifting frame for building blocks comprising a sleeve having means for engagement by a hoist hook or the like, a rod disposed in said sleeve

and journaled in end walls thereof, side links extending from said rod, side frames having perforations for receiving cross bars, cross bars supported in the perforations of said frames, some of the perforations of said frames being in the shape of elongated slots to allow movement of said cross bars in response to lifting force applied to the hoist sleeve, said cross bars being adapted to be disposed in openings in the building blocks to engage a plurality of such blocks laid side by side coaxially with said cross bars, whereby upon the hoisting of the lift all of the blocks will be brought into contacting engagement to constitute a platform for hoisting parallel rows of other blocks supported thereon.

LAWRENCE TE DESCO.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,555,022	Proctor	Sept. 29, 1925
1,922,560	Sullivan	Aug. 15, 1933
2,094,762	Strickland	Oct. 5, 1937
2,177,525	Henderson	Oct. 24, 1939
2,289,366	Johnson	July 14, 1942