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Patented Nov. 6, 1900.

H. NADLER & B. C. LE BLANC.

UNLOADING OR LOADING DEVICE.

(Application filed Aug. 23, 1895.)

(No Model.)

Fig. 1.

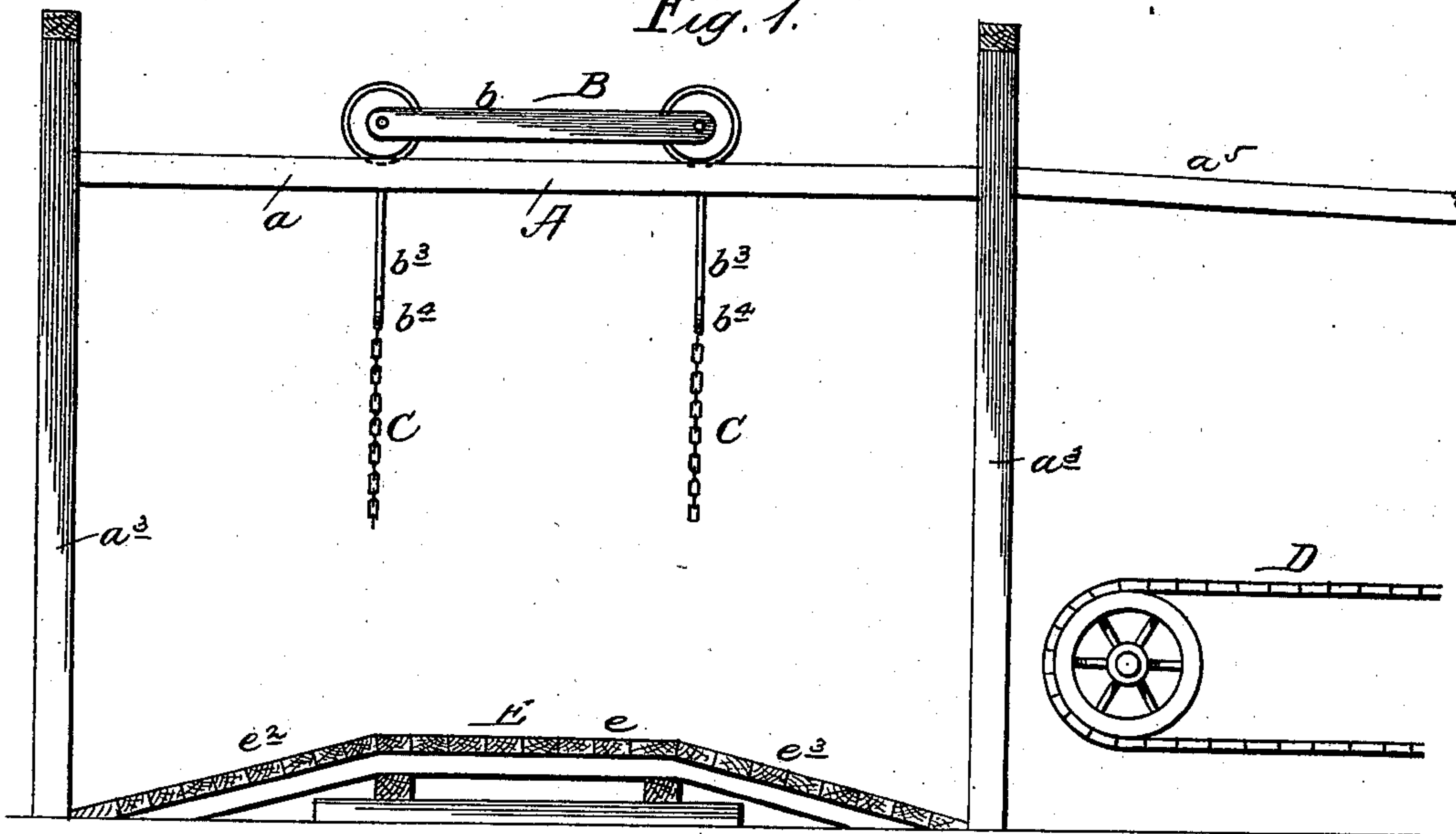


Fig. 2.

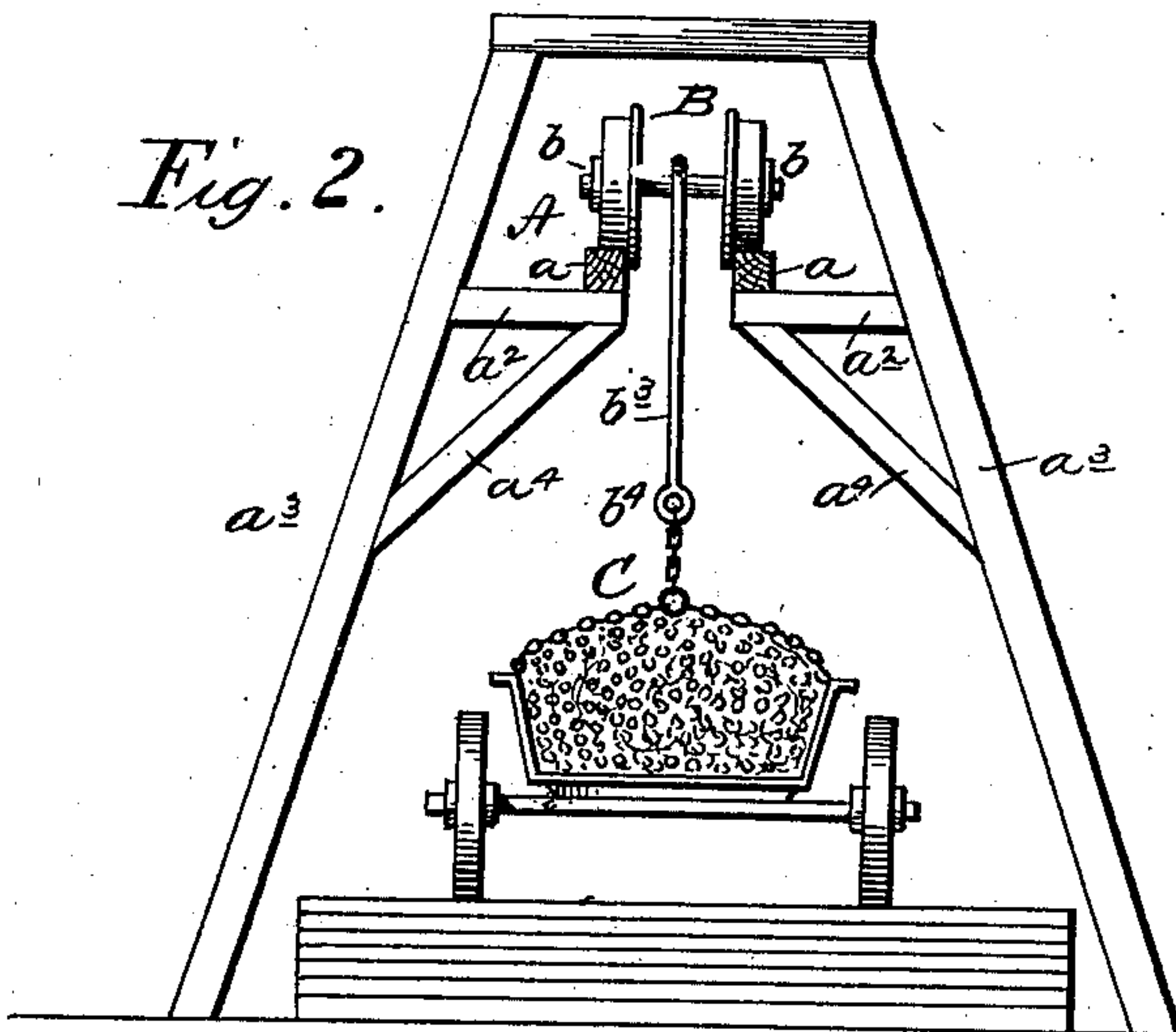
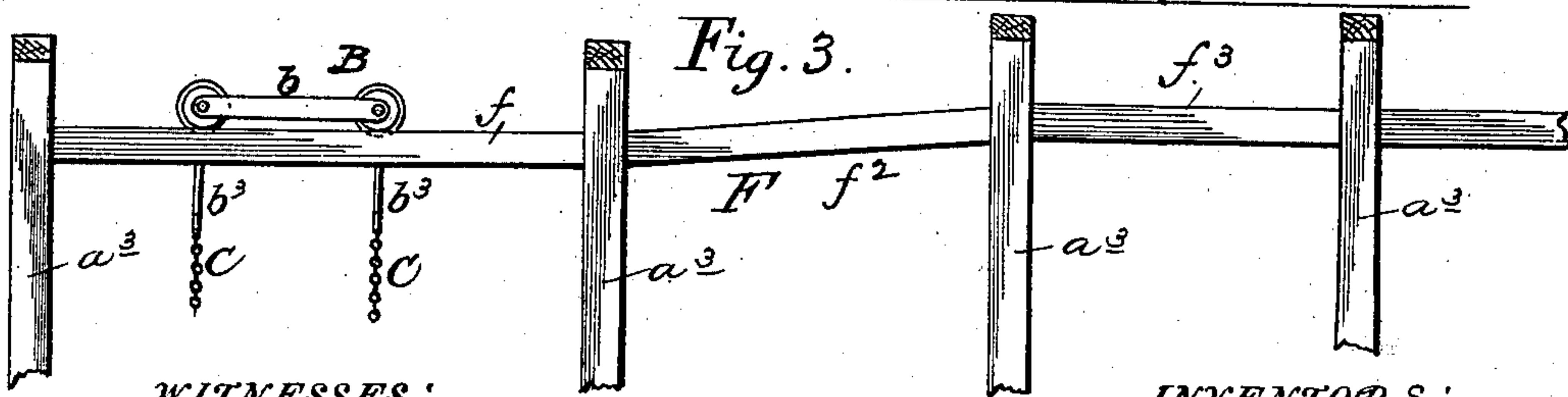


Fig. 3.



WITNESSES.

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HENRY NADLER AND BEN CLARK LE BLANC, OF PLAQUEMINE, LOUISIANA.

UNLOADING OR LOADING DEVICE.

SPECIFICATION forming part of Letters Patent No. 661,154, dated November 6, 1900.

Application filed August 23, 1895. Serial No. 560,244. (No model.)

To all whom it may concern:

Be it known that we, HENRY NADLER and BEN CLARK LE BLANC, citizens of the United States, residing at Plaquemine, in the parish of Iberville and State of Louisiana, have invented certain new and useful Improvements in Unloading or Loading Devices; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to unloading and loading devices.

The object is in a ready and efficient manner to effect the unloading of sugar-cane or the like from a cart or wagon and to transport it to any desired point, whence it may be conveyed to a mill or to a place of storage, the whole being effected without hoisting or separate lifting of the load; furthermore, to provide a novel arrangement of platform to be used in conjunction with an overhead trolley or other form of movable support, the platform being so constructed that forward movement thereon will serve to bring the vehicle containing the cane to a position where the cane may be connected through its binder with the trolley and the further movement of the vehicle in the same direction will operate to unload the cane from the vehicle and leave it suspended from the trolley.

In an unloading and loading device characterized by our invention we provide an overhead track upon which is adapted to run a trolley having supporting means attached thereto, such as chains, hooks, or the like. At one end of the overhead track or that end that will be the loading end in operation and beneath a point where the trolley may be most effectively reached we provide a platform constructed with a central horizontal portion and two oppositely-inclined end portions. At the opposite end of the track or that end which will in operation be the unloading end we provide an inclined section of track which is arranged over an endless carrier for conveying the cane or other material to a place of use or of storage. As a matter of further improvement and as a modification of the form of device just described we may in some instances dispense with the inclined platform at the loading end of the

track and employ in lieu thereof an inclined track-section for subserving the same function as the platform. Instead of having a single track we may have a series of tracks diverging from a main track and extending to a building or other place of storage, by which means cane in bundles may be stored away until ready to be used.

Further and more specific details of construction will hereinafter be fully described.

In the accompanying drawings, forming a part of this specification, and in which like letters of reference indicate corresponding parts, we have illustrated two of many forms of embodiment of our invention.

In the drawings, Figure 1 is a view in side elevation showing the overhead track with its loading end horizontal and with a double inclined platform arranged beneath this end, and showing also the unloading end of the track as inclined toward an endless carrier arranged beneath or contiguous to this latter end. Fig. 2 is a view in end elevation displaying more particularly the manner in which the tracks are braced against sagging and also the peculiar construction of the trolley. Fig. 3 is a view in side elevation of a modified form of track, showing the inclined portion of the track located near the loading end of the device.

Referring to the drawings, A designates an overhead supporting-track, which in this instance is constructed of two parallel sections or rails a , supported upon beams or projections a^2 , carried by uprights a^3 , the beams a^2 being held against sagging by braces a^4 . It is to be understood that the track may be supported by other means than those shown, and for this reason we do not limit ourselves to the precise construction illustrated.

Supported by and adapted to run upon the track is a four-wheeled trolley B, the axles of which are connected to prevent spreading by side bars b , and from the axles of the trolley are suspended hangers b^3 , each having its lower end provided with an eye b^4 , adapted to be engaged by the end link or links of a chain C, which latter constitutes a binder for holding the cane or the like assembled until discharged upon a carrier or other conveying means. It is to be understood that the connection of the chain with the eye b^4 is to be

of such nature that it may be readily detached therefrom, so that where the cane is to be stored away the bundles will remain intact when the chain is disengaged from the eye; also, that instead of employing a chain the binder may be of rope, wire, or the like.

The track A is provided at its rear or unloading end with an inclined section a^5 , arranged over an endless carrier D, which carrier operates to convey the cane to the desired point, as to a mill or a place of storage. In some instances an inclined dumping-platform may be employed instead of the conveyor.

Arranged beneath the front or loading end of the track is a platform E, constituting what may be termed an "unloading-platform." This platform comprises a central horizontal section e and two oppositely-inclined end sections $e^2 e^3$, respectively, the height of the center section e being such that when the cart or wagon is resting thereon the binders may readily be attached to the eye of the hangers.

The operation of the device is as follows: A cart filled with cane, as indicated in Fig. 2, is driven up the incline e^2 and stopped on the center platform e . The binders which have previously been secured around the cane are then connected with the eyes of the hangers, or, if preferred, with a short section of chain depending from each of the hangers, and as the cart moves off from the section e and down the end portion e^3 its body will clear the load and leave it suspended from the trolley. The trolley carrying the load is then pushed along the track until it reaches the inclined portion a^5 , whereupon it will run down and deposit the load upon the carrier D. As the trolley runs down the said inclined portion the strain is taken off the binders, permitting them to be disengaged from the hangers or be removed from around the cane. The carrier may then transport the bundle or the loose cane, as the case may be, to a place of use or of storage.

Instead of locating the inclined track-section at the rear or unloading end of the track we may, if preferred, arrange this section at the front or loading end of the track F, as shown in Fig. 3. In this arrangement there is at the loading end of the track a short horizontal section f , upon which the trolley rests when a load is to be carried away, and extending rearward from this section is an upward-inclined section f^2 , which connects with the main track f^3 , leading to a mill or place of storage. When this arrangement of track is employed, the platform E is dispensed with, as the section f^2 subserves its function. The operation of this latter form of device is as follows: A cart containing bundled cane

drives under the loading end of the track, and the binders are connected with the hangers, as has already been described. The cart is now driven toward the unloading end of the track, thereby drawing the trolley up the inclined section f^2 and lifting the load free of the body of the cart. The load is then pushed to the rear end of the track and disposed of.

It will be observed that in both forms of device the load does not have to be hoisted or separately lifted, the platform E in Fig. 1 and the inclined track-section f^2 in Fig. 3 operating mechanically to remove the load from the cart.

It is to be understood that, if desired, the track F may also be provided with an inclined section at its unloading end.

While we have shown but one trolley in this instance, it is obvious that a greater number may be employed; also, that their construction may be varied.

In some instances an inclined platform may be formed, from which the load may be taken direct by tilting the body of the cart.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. An unloading and loading device comprising an overhead track, a trolley normally stationary thereon but free at all times to be propelled by an agent independent of and disconnected from it, and means acting to lift or clear the load from the vehicle that contains it by the movement of the vehicle itself, alone, and leave the load suspended from the trolley, substantially as described.

2. An unloading and loading device comprising an overhead track, a trolley normally stationary thereon but free at all times to be propelled by an agent independent of and disconnected from it, and means acting automatically to lift or clear the load from the vehicle that contains it by the movement of the vehicle itself, alone, and leave the load suspended from the trolley, substantially as described.

3. An unloading and loading device, comprising an overhead track, having an inclined end portion, trolleys adapted to run thereon, a conveyor arranged below the inclined portion, and a double inclined platform located below the track at the end opposite the inclined portion, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY NADLER.

BEN CLARK LE BLANC.

Witnesses:

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