

(No Model.)

L. ACKERMAN.
HAY AND GRAIN UNLOADER.

No. 266,597.

Patented Oct. 31, 1882.

Fig. 1.

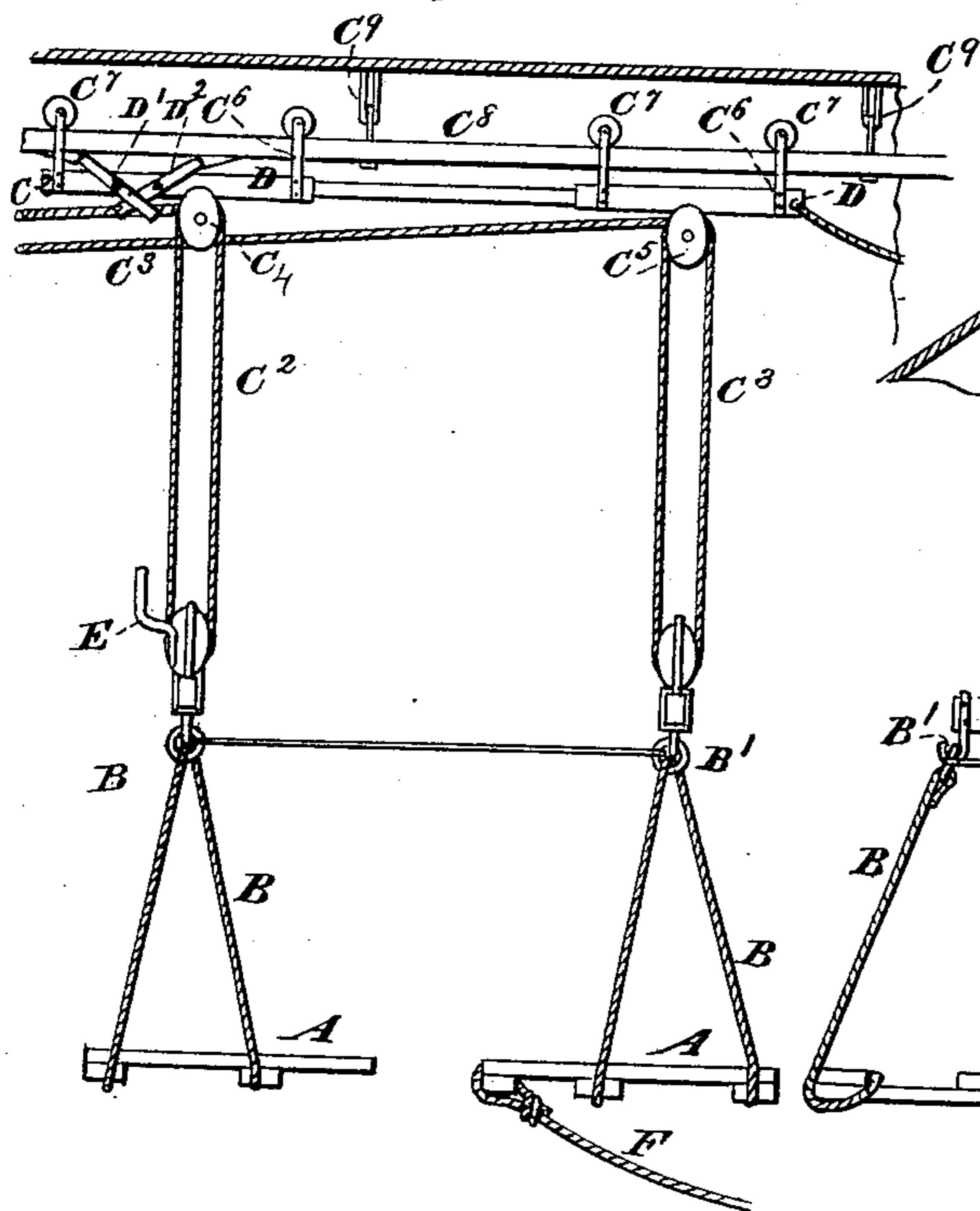


Fig. 2.

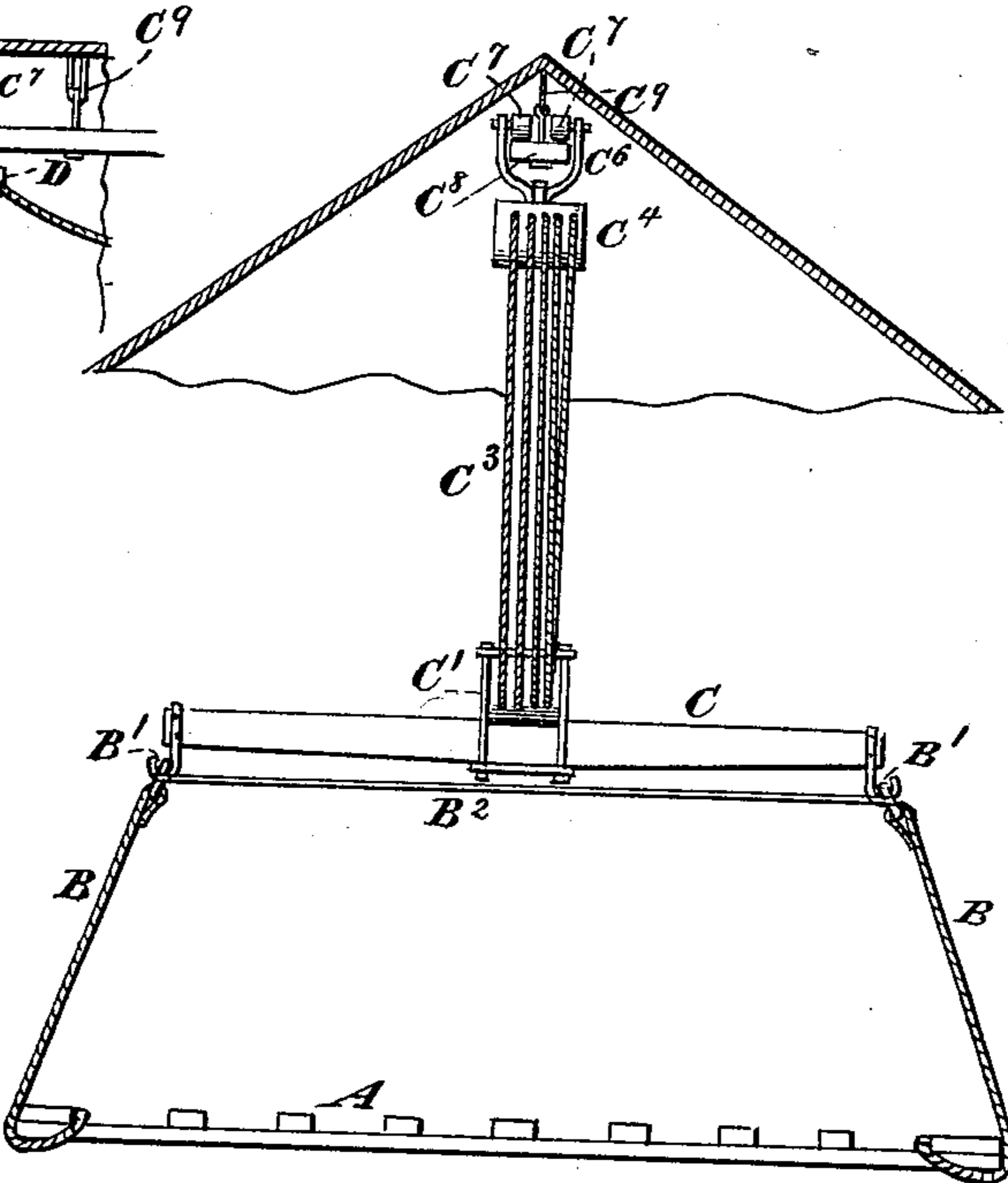


Fig. 3.

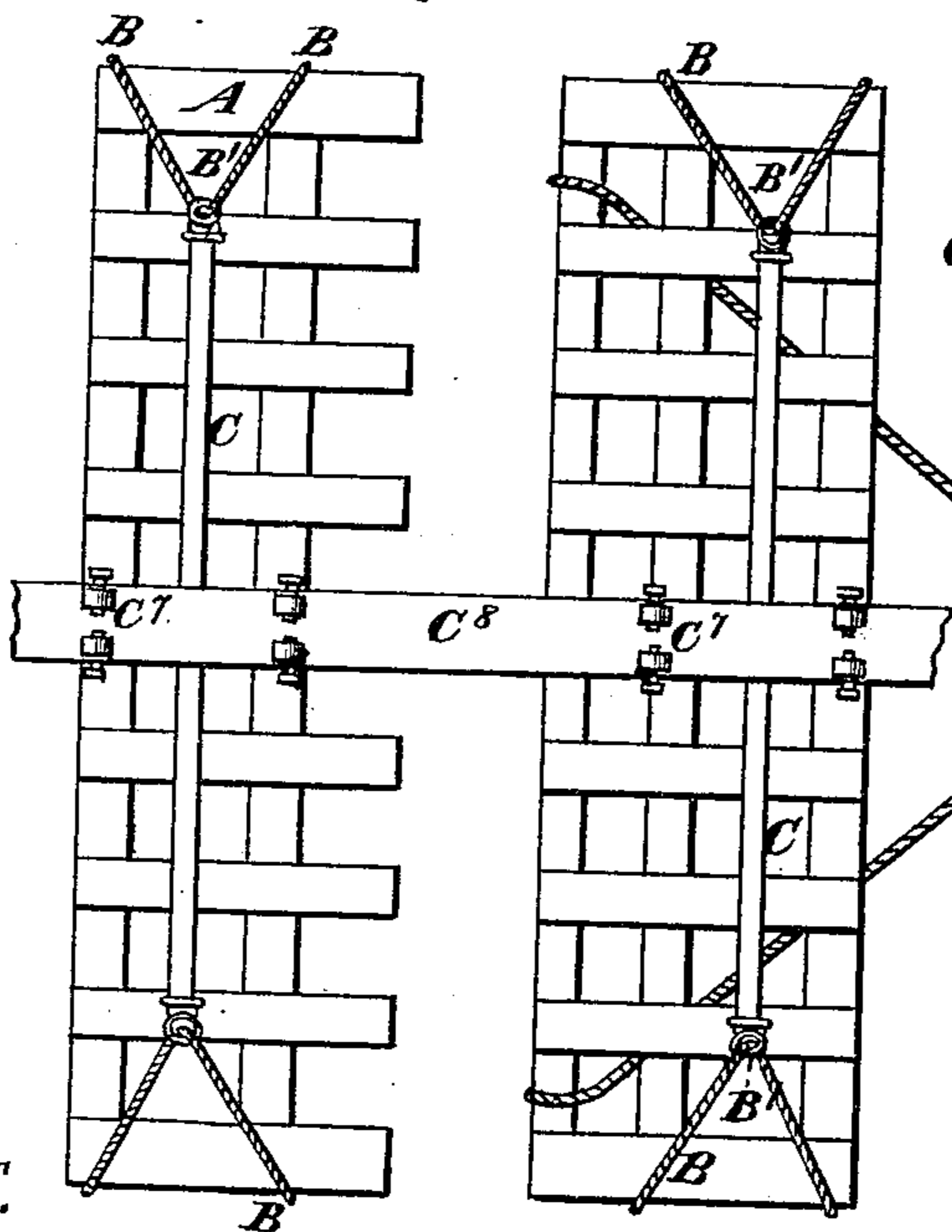
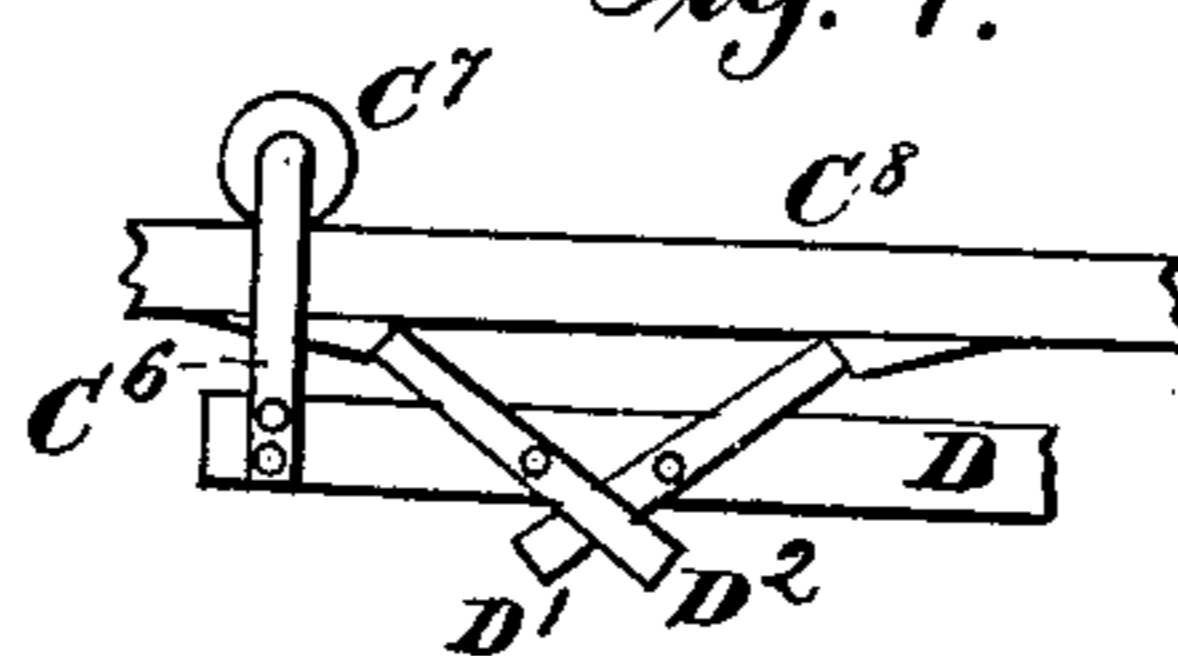


Fig. 4.



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LYMAN ACKERMAN, OF DEXTER, NEW YORK.

HAY AND GRAIN UNLOADER.

SPECIFICATION forming part of Letters Patent No. 266,597, dated October 31, 1882.

Application filed July 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, LYMAN ACKERMAN, a citizen of the United States, residing at Dexter, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Machines for Unloading Hay, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to devices for unloading hay, grain, and other similar substances from wagons and carts and placing it on the mow in a barn or other structure or on a stack; and the objects of my improvements are, first, to provide a platform or platforms which may be placed upon a wagon or cart such as are commonly used for the transportation of such substances, onto which the hay or other substance is placed, where it is allowed to remain until the place of deposit has been reached, when, by the use of mechanism, to be hereinafter described, the platform, with its load, is raised and carried to the part of the mow where it is to be placed, and then dumped, when the platform is returned to the vehicle, preparatory to receiving another load; and, second, in providing certain combinations of the parts of which the device is composed. I attain these objects by the devices illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, showing the ridge-pole of a barn or other structure, a rail or track attached thereto, a car or traveling carriage suspended thereon, devices for holding the car in position, a platform for receiving the load, ropes and blocks for raising the load, and ropes for moving the car and for dumping the material. Fig. 2 is an end view, showing the platform suspended, the bar to which the hoisting-blocks are attached, the platform, and the bridles or ropes for attaching it to the bar. Fig. 3 is a plan view of the devices, showing, also, a rope controlling its position; and Fig. 4 is a detail view of a device for retaining the car or carriage in a proper position while being elevated.

Similar letters refer to similar parts throughout the several views.

In constructing an apparatus of this character I provide a platform, A, of wood or other suitable material, which may be adapted to be placed lengthwise or crosswise of the body of

a wagon or cart, its dimensions in either case being nearly or quite equal to those of such body.

As a means of raising the platform, which by preference consists of two parts or sections, as shown in Figs. 1 and 3, there is attached to the ends of each of the sections bridle-ropes B B, which, when the load is placed thereon, are raised up into the position shown in Figs. 1 and 2, their upper or outer ends being provided with rings B', which are dropped into hooks secured upon the ends of beams C C, the rings being prevented from being displaced or thrown out of the hooks at improper times by a rod or rope, B², which extends from one to the other. The length of the beams C C, above alluded to, is somewhat less than that of the platforms, in order that when it is being raised the bridle-ropes B B may serve to compress the material to such an extent as to prevent it from falling off.

To the center of each of the beams C C there is attached a pulley-block, C', which may have in it any desired number of sheaves, around which to pass the hoisting-ropes C² and C³, which are passed through blocks C⁴ and C⁵, as shown in Figs. 1 and 2. To the upper surface of these blocks there is secured a yoke, C⁶, to the upper ends of which are attached wheels C⁷ C⁷, which rest upon a rail or track, C⁸, which is attached to the ridge-pole of the building by a rope or by links C⁹, which admit of its being swung sidewise, in order that the load may be dumped on different parts of the mow.

In making provision for moving the platforms and their loads lengthwise of the building, there is attached to the lower ends of the yokes C⁶ a bar of metal, D, to which the blocks C⁴ and C⁵ are attached, there being two such bars, which are connected together by a bar or rod, the two forming a car or carriage, upon which the platforms are suspended, as shown in Fig. 1. The track may extend the entire length of the building or only such portions as are adapted for the reception of the material to be stored.

For the purpose of retaining the car or carriage in a proper position for being elevated, or over that portion of the building or ground where the wagon or cart is placed when loaded, there is pivoted two levers, D' and D², the lower ends of which are to be of greater weight

than their upper ones, which, when in use, rest against shoulders or stops formed on the under surface of the rail or track C⁸, in which position they prevent the car or carriage from moving on said rail, and thus retain it in position longitudinally until the platform and its load have been raised to such an extent as to cause the bent arm E, attached to the lower blocks of hoisting-ropes C², to enter the space between the levers D' and D², and thus force downward the upper ends to such an extent as to free them from contact with the shoulders or stops on bar C⁸, when, by continuing to draw upon the ropes C² and C³, the car or carriage will be moved along the rail or track until it has reached the point where the material is to be dumped, such dumping being effected by means of a rope, F, attached at one of its ends to one section of the platform and its opposite end to some fixed device, it being given so much slack as will allow the load to be raised and carried along the track to the proper point

for dumping, when it will stop such movement and will open the space between the sections of the platform to such an extent as to allow the material to fall down on the mow. 25

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the arm E, the levers D' D², and the shoulders or stops formed on the rail or track C⁸, substantially as and for the purpose set forth. 30

2. The combination of the sectional platform A A, the bridles or ropes B, bars C C, hoisting-ropes C² and C³, blocks C⁴ C⁵, and a car or carriage traveling on a rail or track adjustably attached to the ridge-pole of a barn or other structure, substantially as and for the purpose set forth. 35

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Witnesses:

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