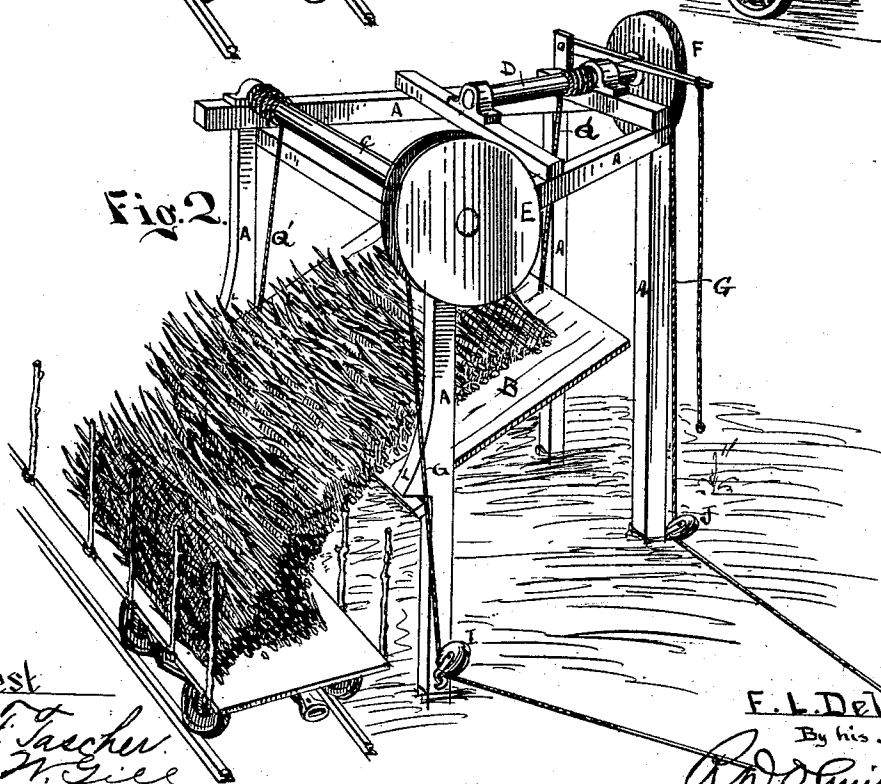
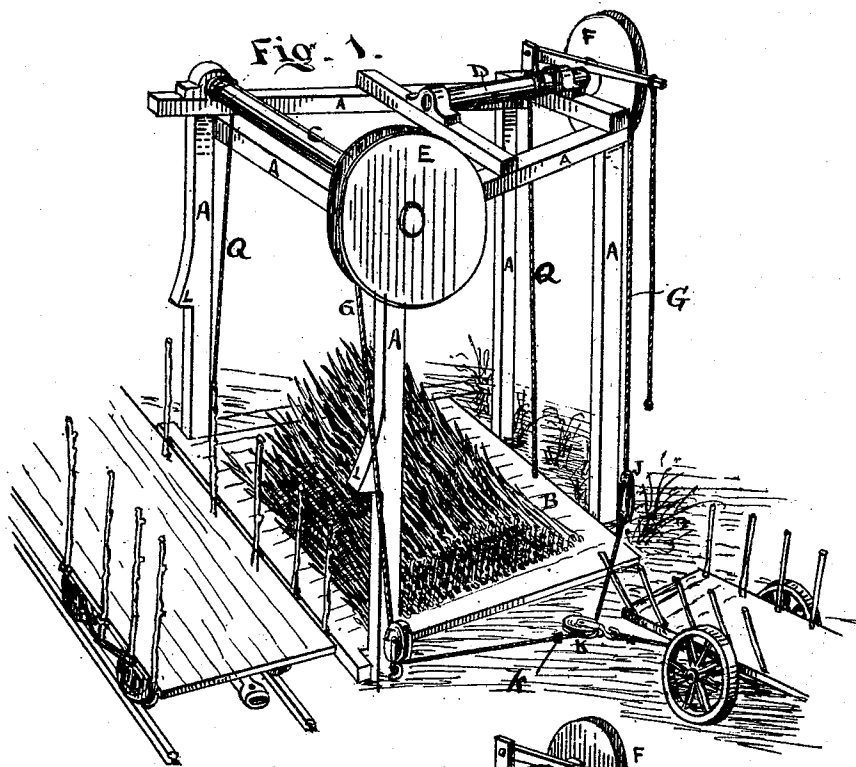


(No Model.)

F. L. DELFER.
TRANSFERRING MACHINE.

No. 494,129.

Patented Mar. 28, 1893.



Attest
J. F. Tischer
G. W. Gile

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By his Atty
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UNITED STATES PATENT OFFICE.

FRANCIS L. DELFER, OF ST. PATRICK, LOUISIANA.

TRANSFERRING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 494,129, dated March 28, 1893.

Application filed April 15, 1892. Serial No. 429,330. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS L. DELFER, of St. Patrick, St. James parish, in the State of Louisiana, have invented a new and useful
5 Machine for Transferring Sugar-Cane and other Substances from Carts or Wagons to Railroad-Cars or Freight-Wagons, of which the following is a specification.

This invention is particularly adapted to
10 the handling of sugar-cane on plantations, but I do not desire to be confined to that adaptation nor to the exact structure and arrangement of parts shown in the drawings attached hereto. Within the past few years it has be-
15 come customary in many quarters for planters to transport their cane to some neighboring sugar house to be crushed and made into sugar in that way securing the benefit of larger and more perfect appliances than would be possi-
20 ble on a plantation of moderate proportions. On the larger plantations likewise the distances from the sugar house to the remote fields are so great that it is necessary to transport the cane upon tram-cars or freight wag-
25 ons, and thereby keep the field carts near the field and at work with short hauls. Sugar cane, after being cut, is a perishable commodity and requires to be submitted to the crushers with the least possible delay. It is
30 therefore important to facilitate the transference of the cane from the cart to the car or wagon without increasing the number of men employed. For this purpose some have employed a hoist which takes the cart body from the running gear, together with the load and
35 deposits them upon the platform of the car. The inconvenience of this practice is apparent. Others have placed ropes in the cart body upon which the cane is piled and by
40 means of which the whole load may be raised out of the cart. While this method is less inconvenient than the first named, the use of ropes involves a very considerable expense and inconvenience and to obviate all such in-
45 conveniences as well as to economize time in the transfer, I have devised my present invention which consists essentially in a platform over which the cars may drive and on which the load may be dumped, and a hoist
50 for the same arranged so that after said platform has been elevated a proper distance that edge which is toward the car or wagon may

be automatically arrested while the opposite edge continues to rise until the whole load, by gravity, slides from the platform onto the car
55 or wagon. The hoist may be operated by the carter with the animal which draws his cart and does not occupy more than two or three minutes at the utmost.

Having now indicated the nature and prin-
60 ciple of my invention I will particularly describe the way in which I have constructed and successfully operated it.

Figure 1 is a perspective view. Fig. 2 is a
65 similar view, but with the platform elevated.

I first erect of suitable timbers A. A. a
70 frame wide and tall enough for a cart loaded, with the material to be hauled, to pass through. If for sugar cane, the posts must, at one side, be so far apart that the lengths of the canes
75 can freely pass between them. A platform B. is placed within this frame with one of its edges projecting beyond said frame. This projecting edge is adjacent to the track or road upon which the cars or wagons run.

On top of the frame two windlasses C. D.
80 are mounted and on the end of said windlasses, drum pulleys E. F. are respectively mounted. Hoisting ropes or chains Q from the front or projecting ends of the platform
85 B. pass up to and around the windlass C. and one or more similar chains or cords pass from the rear side of said platform up to and around the windlass D. Ropes G. pass from the drum pulleys E. F. respectively down to
90 guide wheels I. J. and thence to a point where the power may be applied. I have preferred to make the hoisting rope of one rope with its two ends attached to the drums E. F. respectively and with its central part passing through
95 a draft pulley K. to which the team may be attached. It will now be perceived that if the pulley K. be drawn away it will draw out and unwind the cord from both drums E. F. and correspondingly wind the hoist ropes upon the drums C. D. If one side of the platform B. be
100 arrested however the rope G. will begin to render through the pulley K and continue to unwind from the drum pulley on the unobstructed side. The effect of this is to tilt the platform until whatever may be resting loosely upon it, may slide off. To accomplish this object I have placed upon the front posts A. stops L at a proper height. The front edge

of the platform is arrested in its ascent, by the blocks L, and its rear edge being unobstructed, will continue to rise until the inclination becomes so great that the load upon said platform will slide off.

It will be observed, if the load is unevenly distributed upon the platform, the overweighted edge will tend to remain upon the ground while the under weighted edge will be raised. This can be equalized by a brake attachment applied to the pulley K to prevent the rope G from passing in said pulley while all parts of the platform are ascending. This brake may consist of a clamping pawl which will clamp the rope against the pulley sheave, or some other convenient device for holding the rope. I have accomplished the same object by a stopper K, such as a knot placed on the rope G between the pulley K and the dump side of the platform, and then by purposely overloading the rear side of said platform. The effect of this arrangement is satisfactory and automatic in its action as the over load at the rear would cause the front edge to rise faster, but the knot or stopper on the rope will prevent it from passing through the pulley K and thereby the front edge will be compelled to rise equally with the rear. But when the front edge is arrested the knot will move away from the pulley and the rope will render freely from the rear side.

To ease the descent of the platform after being emptied, counterweights may be attached to it by means of ropes passing over pulleys on top of the frame. It may also be further regulated by means of brakes applied to the drums, or they may be simple bars resting on the windlass and operated by the attendant below.

Having described my invention, I claim—

1. In a transfer apparatus the combination of a platform, independent hoists, attached to the front and rear sides of the same, an actuating rope connected with both of said

hoists, and means for arresting the operation of one of the hoists during the operation of the actuating rope, substantially as described.

2. In a transfer apparatus the combination of a platform, independent hoists connected with the front and rear sides of the same, an actuating rope connected with both of said hoists, means for arresting the ascent of one side of the platform, and mechanism for retarding the operation of one of the hoists, substantially as described.

3. In a transfer apparatus the combination of a platform, independent hoists attached to the front and rear sides of the same, means for actuating said hoists, posts or guides along which the platform moves in its ascent, and stops L on said guides in line with and above the front portion of the platform, substantially as described.

4. In a transfer apparatus the combination of a platform, independent hoists attached to the front and rear sides of the same, an actuating rope connected with both of said hoists, a pulley K on said rope, and means for retarding the operation of one of the hoists during the operation of the actuating rope, substantially as described.

5. In a transfer apparatus the combination of a platform, independent hoists connected with the front and rear sides of the same, an actuating rope connected with both of said hoists and provided with a stopper, a pulley K on said rope and means for arresting the upward movement of the front side of the platform, substantially as set forth.

6. In a transfer machine, a platform B, drums C. D. with the hoist ropes or chains attached to said platform, drum pulleys E. F., the hoist rope G common to both said drum pulleys, and the draft pulley K.

FRANCIS L. DELFER.

Witnesses:

JAS. R. BIGGAR,
ROBERT ZIMMER, Jr.