

(No Model.)

J. MALLON.
SUGAR CANE SLING.

No. 571,675.

Patented Nov. 17, 1896.

Fig. 1.

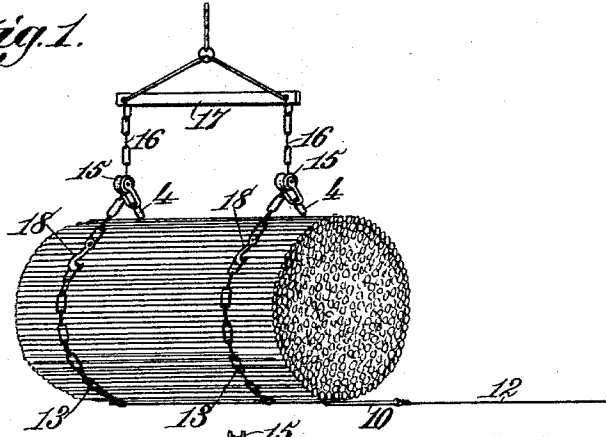


Fig. 2.

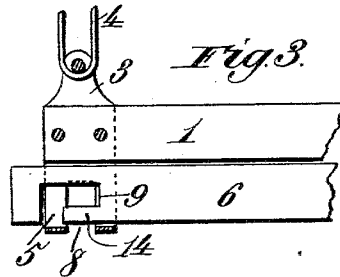
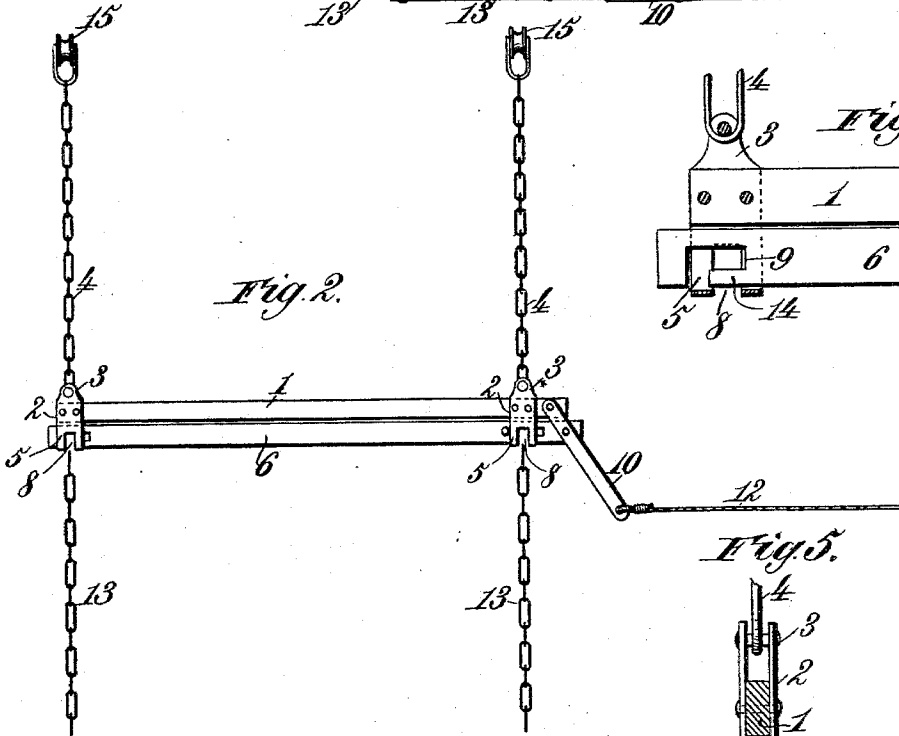


Fig. 5.

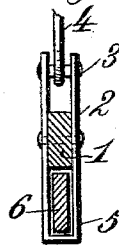
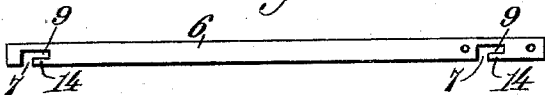


Fig. 4.



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UNITED STATES PATENT OFFICE.

JAMES MALLON, OF NEW ORLEANS, LOUISIANA, ASSIGNOR OF ONE-HALF
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SUGAR-CANE SLING.

SPECIFICATION forming part of Letters Patent No. 571,675, dated November 17, 1896.

Application filed May 4, 1896. Serial No. 590,183. (No model.)

To all whom it may concern:

Be it known that I, JAMES MALLON, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Slings for Unloading Sugar-Cane or other Material from Wagons, of which the following is a specification.

My invention relates to certain novel improvements in slings for unloading sugar-cane or other material from wagons, my purpose being to provide a cheap and simple construction and combination of parts whereby sugar-cane or other material of substantially similar kind may be easily and speedily unloaded from a wagon or other conveyance and loaded upon or transferred to a car, vessel, or other receptacle.

It is one purpose of my invention to provide a sling which can be readily handled by any single person, which will occupy but little space in a wagon, and which can be used with any ordinary form of crane or hoisting mechanism without requiring the addition thereto of any attachment or part specially devised for such purpose.

It is my further purpose to avoid the necessity of withdrawing the chains or cords which surround the mass of cane from beneath the latter after it has been transferred from one point to another by means of the sling, this operation requiring much time and seriously impeding the rapid progress of the work, besides causing excessive wear to the cords or chains as well as to the surface upon which the cane lies, and demanding also a hoisting mechanism capable of lifting to a height above the cane-receptacle equal to the full length of the cords or chains of other slings now in use, which is not always possible.

My invention consists to these ends in the novel features of construction and in the parts and new combinations of parts hereinafter fully described, and then particularly pointed out and defined in the claim which concludes this specification.

To enable others to fully understand and to make and use my said invention, I will now describe the same in detail, reference

being had for this purpose to the accompanying drawings, in which—

Figure 1 is a perspective view showing my invention in use. Fig. 2 is an inverted plan view showing the parts composing the sling. Fig. 3 is a detail view, upon an enlarged scale, showing the construction of the locking and releasing devices. Fig. 4 is a detail view of the locking-bar of the sling; and Fig. 5 is a transverse section of the parts shown in Fig. 2, taken in a line passing through one of the clips.

The reference-numeral 1 in said drawings indicates a bar, preferably of metal, of any suitable length and having such width and thickness as may be required to give the necessary strength. At or near the ends of this bar are rigidly attached by bolts, rivets, or other suitable means clips 2, which inclose both of the flat faces of the bar and extend beyond both its edges. On one projecting end of each clip is mounted or formed an eye, loop, or staple 3, which permanently engages the end link of a chain 4. Upon the other side of the bar 1 each clip is formed into a loop 5 of such size as to admit a bar 6, having substantially the same dimensions as the bar 1, save that it is preferably, though not necessarily, a little longer.

In the edge of the bar 6 most remote from the bar 1 are formed slots 7 cut part way the width of the bar at such points that when the latter is moved in the loops 5 said slots may be caused to register with openings or channels 8 cut through the bottoms of the loops 5 and far enough into their sides to coincide with the slots 7 in the bar 6. The latter communicate with slots 9, formed in the longitudinal line of the bar and extending in the same direction.

Upon one end of the bar 1, which is prolonged for the purpose beyond the clip 2, is fulcrumed a lever 10, which crosses and is pivotally connected to the prolonged end of the bar 6. To the free end of this lever, which may be of any suitable length according to the degree of strain to which it may be subjected, is connected a pull-rope, wire, or chain 12. The arrangement and connection of the lever 10 is such that when it is turned

upon its fulcrum until it stands substantially at a right angle with the bar 1, the bar 6 will be moved in the direction of its length far enough to close the slots 7 by bringing them upon one side of the slots or channels 8 in the loops 5. If the end links of chains 13 are inserted in the said slots 8 and 7 before this adjustment of the lever 10 is made, said links will be engaged by the fingers 14 on the bar 6, which will enter the links, the ends of said fingers being then thrown by the movement of the bar upon one side of the slots 8 in the loops 5. The ends of the chains will thus be securely locked until the cord 12 is pulled, causing the lever 10 to slide the bar 6 in the loops 5 and bring the slots 7 into coincidence with the slots 8 in said loops, whereupon the links will fall out.

The chains 4 and 13 are of suitable length, according to the load the sling is to carry.

In use the bars 1 and 6, with chains connected in the manner described, are placed in a wagon lying substantially in the central longitudinal line thereof. The chains are drawn over the opposite sides of the wagon-body and the sugar-cane or other long material is piled in the wagon or cart lengthwise. When a sufficient load is gathered, the chains are drawn around it and their ends connected, though this may be deferred until the wagon arrives at the point where the load is to be transferred. At said point a hoist of any ordinary sort is provided to raise the load and swing it over the car or other receptacle in which it is to be placed. For some reasons I prefer to provide the ends of the chains 4 with spools 15 or other equivalent devices, through which may be passed chains 16, hanging from a yoke 17 on the hoisting apparatus, their ends being furnished with hooks 18, which engage the chains 13. This arrangement prevents any part of the load

escaping, as the chains are drawn closely around it. I do not, however, limit my invention to this feature, as I may dispense with the spools and connect the chains 4 and 13 to the hoisting apparatus in any manner preferred. When the load is hoisted out of the wagon and swung over the point where it is to be placed, the lever 10 is operated by the pull-rope, and the chains 13 are simultaneously released from the slide-bar 6. The load is thus discharged from the sling in an instant. If this release takes place when the cane is a foot or two above the surface on which it is to rest, the separated parts of the sling will merely swing apart and may be detached from the hoist and returned to the wagon without any appreciable loss of time.

What I claim is—

In a sling for unloading sugar-cane and similar long material, the combination with a bar having clips, of chains attached to said clips, a locking-bar movable longitudinally in loops forming part of said clips and provided with open transverse slots in one edge adapted to register with slots cut through the bottoms of the loops, said open slots communicating with slots extending lengthwise and in the same direction in the locking-bar, chains having links which lie in said slots and are locked by fingers on the bar formed by the slots, and a lever fulcrumed on the bar carrying said clips and pivotally connected to the locking-bar, for operation, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES MALLON.

Witnesses:

FRANK MCGWIN,
CHAS. L. QUEDNESQUIE.