

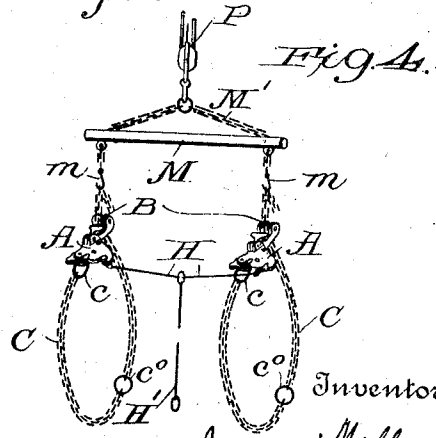
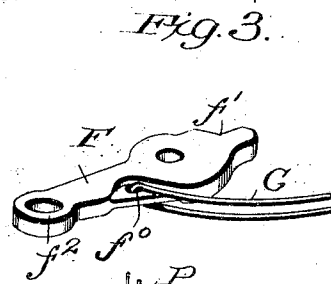
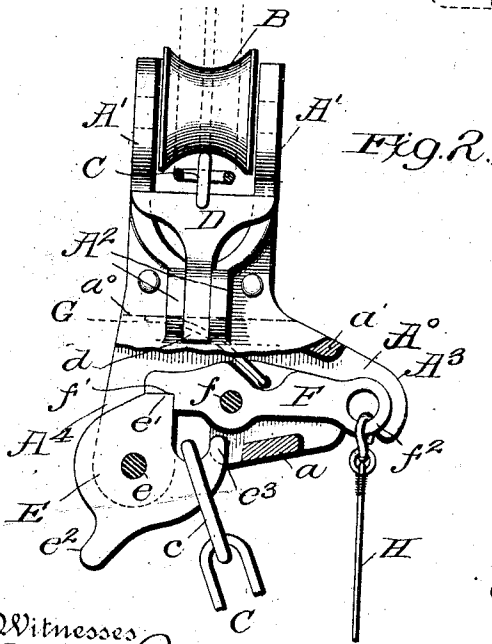
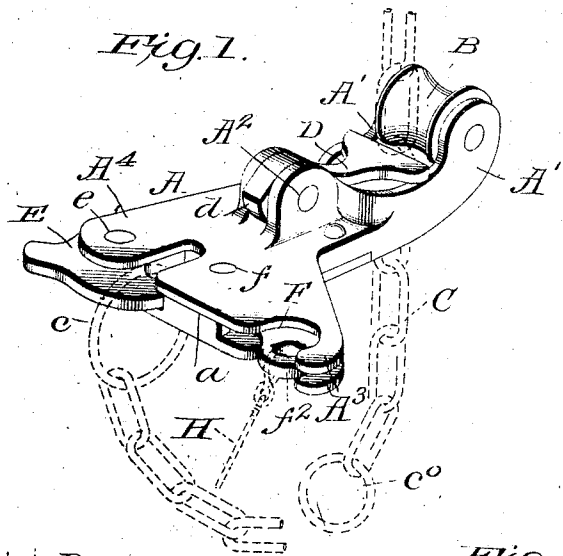
J. MALLON.

CANE SLING.

APPLICATION FILED JAN. 18, 1909.

922,929.

Patented May 25, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES MALLON, OF NEW ORLEANS, LOUISIANA, ASSIGNOR OF ONE-HALF TO BOLAND MACHINERY & MANUFACTURING CO., OF NEW ORLEANS, LOUISIANA, A CORPORATION OF LOUISIANA.

CANE-SLING.

No. 922,929.

Specification of Letters Patent.

Patented May 25, 1909.

Application filed January 13, 1899. Serial No. 479,937.

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 certain new and useful improvements in Cane-Slings; and I 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 improvements in cane slings intended to handle loads of cane from wagons to cane cars, and from said cars to the carrier, or else to transfer the loads direct from the wagons to the carrier, as is well known in the art. In such devices, it is very important that the load should be promptly and efficiently released at the desired moment, and that no parts of the metallic slings should be freed from the apparatus, and fall in with the load, to be possibly carried by the carrier to the mill, to the probable serious injury of the latter.

My invention is especially intended as an improvement upon the device shown in patent for a cane sling, No. 610,816, granted to me September 13, 1898.

My invention will be understood by reference to the accompanying drawings, in which the same parts are indicated by the same letters throughout the several views.

Figure 1 is a perspective view of one of the tripping devices. Fig. 2 is a side elevation of the device shown in Fig. 1, parts being broken away. Fig. 3 is a detail view, showing the trigger, and Fig. 4 shows diagrammatically a pair of slings hooking on to the hoisting out apparatus, ordinarily a derrick.

A represents a frame, preferably made of two members bolted snugly together, with ribs a, a' cut away to form a chamber A^a (see Fig. 2), to receive the trigger and tumbler. This frame is provided with a yoke A' , in which is journaled a curved roller B, over which is rove the chain C.

D represents an automatic clamp, pivoted between the lugs A^2 of the frame, and having an end stop d to prevent the clamp from opening so far as to fail to be operated by gravity, as will be hereinafter described. The end of the chain C may be provided with a link e , adapted to engage the hook e' of the tumbler E, which is pivoted as at e , in the arms A^4 of the main frame. This tumbler has

an arm e' which engages in the notch f on the trigger F. The tumbler is also preferably provided with a hand lug e'' for facilitating operation. The trigger F is normally held into locking engagement with the tumbler 60 by means of the wire spring G, which is slipped through the hole f^0 in the trigger, as shown in Fig. 3, and the ends engage against the bearing face a^0 on the main frame, as shown in Fig. 2. The outer end of the trigger 65 is provided with an eye f^2 , connected to the tripping line H. These two lines H are preferably connected together to form a bridle, as shown in Fig. 4, so that the two may be simultaneously operated by pulling on the 70 line H'.

Any suitable hoisting-out device may be provided, such, for instance, as that shown in Fig. 4, in which there are two hooks n adapted to engage in the links of the chain C, 75 which hooks are suspended from a cross-bar M held from the bridle M', hoisted by the tackle P, which may be connected to any suitable derrick, or the like.

The operation of the device is as follows: 80 As described in my patent aforesaid, the chains are placed across the bottom of the empty wagon, with the frames A hanging over one side of the wagon, and the links c on the other. The cane is then put in the 85 wagon, and after the load has been completed, the link c is hooked over the tongue e^2 , and the trigger is snapped into engagement by the spring G, the parts then being in the position shown in Fig. 2. Now the free 90 end of the chain C is drawn through the space between the roller and the clamping device by hand until the chain is hand taut. The clamp D will automatically lock it in this position by its own weight, causing the chain 95 to be held between the roller and the clamp. As soon as the hoisting apparatus begins to pull on the free end of the chain, the latter will Reeve through the clamp until when the load is lifted the chain slings bind it around 100 the same. Now if the load be lowered into a car, the chain will be held clamped tight around the bundle, the tension on the chain slings causing all the parts to be held firmly against any possible release. If it be preferred to dump the load, released from its slings, into the car or alongside of the carrier, this may be done by simply pulling on the tripping line H', which will release both trig- 105 gers F, releasing the links c from the tumblers 110

E, allowing the load to drop clear of the slings.

It will be noted that the load may be dropped from any desired height, thus saving time in lowering. Furthermore, the load may be dropped from a great enough height to allow the chain slings to swing entirely clear of the ground. It will be seen that when the load is released while in the air, as aforesaid, the tripping device will slide down the chains until it is arrested by the links *c*^o, and thus is prevented from becoming detached from the chain, and possibly finding its way on the carrier to the mill.

It will be obvious that large links may be placed anywhere in the sling, which will prevent the tripping frame from slipping down to the end of the chain, should such be deemed advisable.

It will be seen that I provide an extremely strong and durable device, which will securely hold the bundle of canes in the slings, which may be released with great facility, and the parts of which are not only strong in themselves, but are protected in a large measure by the frame against injury from the rough usage to which such apparatus is subjected.

It will be obvious that various modifications might be made in the herein-described apparatus, which could be used without departing from the spirit of my invention.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States is:—

1. In a cane sling, the combination with a frame having a yoke at one end thereof, a curved grooved roller mounted in said yoke, and a pivoted gravity operated clamp adapted to automatically clamp said chain against unreeving, with a tumbler pivoted in the opposite end of said frame, and having a hook adapted to engage one end of the chain and also a holding arm, and a trigger pivoted in said frame and provided with a notch engaging said holding arm of said tumbler, said trigger being also provided with a hole in its back, a wire spring bent double and passing through said hole, and having its free ends bearing against a wall in said frame, said spring normally holding said trigger in locking engagement with said tumbler, and

a tripping line secured to the outer end of said trigger for releasing same from engagement with said tumbler, substantially as described.

2. In a cane sling, the combination with a frame having one end recessed and a yoke at the opposite end thereof, a curved grooved roller mounted in said yoke, and a gravity operated clamp pivoted to said frame and adapted to automatically clamp said chain against unreeving, a tumbler pivoted in the recessed portion of said frame, and having a hook adapted to engage one end of the chain, a hand lug, and also a holding arm, and a trigger also pivoted in the recessed portion of said frame and provided with a notch engaging said holding arm of said tumbler, a spring normally pressing said trigger into locking engagement with said tumbler, and a tripping line connected to the opposite end of said trigger and adapted to withdraw same from engagement with said tumbler against the action of its spring, substantially as described.

3. In a cane sling, the combination with a frame having one end recessed, and a yoke at the opposite end thereof, a curved grooved roller mounted in said yoke, and a pivoted gravity operated clamp combining with said roller to automatically clamp said chain against unreeving, a tumbler pivoted in the recess in the opposite end of said frame, and having a hook adapted to engage one end of the chain and also a holding arm, and a trigger pivoted in said frame and provided with a notch engaging said holding arm of said tumbler, said trigger being also provided with a hole in its back, a wire spring bent double and passing through said hole, and having its free ends bearing against a wall in said recessed end of said frame, said spring normally holding said trigger in locking engagement with said tumbler, and a tripping line secured to the outer end of said trigger for releasing same from engagement with said tumbler, substantially as described.

In testimony whereof, I affix my signature, in presence of two witnesses.

JAMES MALLON.

Witnesses:

EUGENE STANLEY,
JOHN O. MOTSCH.