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SACK-HOLDING ATTACHMENT.

1,132,600.


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To all whom it may concern:

Be it known that I, HARRISON I. MOORE, a citizen of the United States, residing at Windsor, in the Province of Nova Scotia and Dominion of Canada, have invented certain new and useful Improvements in Sack-Holding Attachments, of which the following is a specification.

This invention relates to a sack holding attachment by means of which sacks may be suspended beneath an outlet spout.

The particular object of the invention is to so construct each attachment that it may be adjusted to accommodate sacks of different sizes.

Another object of the invention is to provide an improved type in bars for connecting and mounting the sack engaging pawls, the bar being an improvement over the bar shown in my prior patent which bears Patent Number 1,106,370.

This invention is illustrated in the accompanying drawings in which:

Figure 1 is an end elevation of a frame provided with the improved sack holder.

Fig. 2 is a side elevation of one end portion of a frame provided with the improved sack holder.

Fig. 3 is a perspective view of two of the sack engaging pawls and their connecting rod or bar.

Fig. 4 is a fragmentary, longitudinal, sectional view through the connecting bar taken along the line 4-4 of Fig. 5.

Fig. 5 is a transverse, sectional view through the connecting bar taken along the line 5-5 of Fig. 4.

The frame 10 of the sack holder is suspended beneath the outlet spout of a hopper or other receptacle by means of suspending arms 11 and has one side wall broken away as shown in Fig. 1 so that the material flowing through the frame may be watched by the operator. To one side of the frame there is provided a pivotally mounted latch 12 which has its arms 13 provided with eyes through which the hinge brackets 14 pass, and has its cross bar provided with a handle 15 by means of which the latch may be swung to a disengaging position.

At each end of the frame there is provided a cross bar 16 which provides means for pivotally mounting the pawls 17. These pawls 17 are provided with rectangular openings 18 through which the reduced ends 19 of the cross bar pass, thus causing the pawls and cross bar to move together. It will therefore be seen that when the latch is swung out of the normal position shown in Figs. 1 and 2, the pawls on both sides of the frame can swing downwardly and thus permit the filled sack to drop to the floor. The pawls can then return to their normal position with the abutment ends 20 fitting into the cut-outs in the lower edge portions of the pawls, the latch holding the pawls in the desired position until the latch has again been moved to a disengaging position. Each of these cross bars comprises a major member or sleeve 21 and an auxiliary member or rod 22 which fits into the major member and is provided with counter sunk holes 23 into which the set-screw 24 may be fitted. The outer ends of the rod and sleeve are reduced and squared as shown at 25 and abutment shoulder 26. Therefore the cross bar can be put in position as shown in Fig. 1 with the end portions of the major member passing through openings formed in the pivot ears 27 extending from the frame 10. The bearing 25 passes through the opening of one of the ears 27, and when its pawl 17 is put in place and secured upon the reduced end 19 of the sleeve, the sleeve will be prevented from having longitudinal movement. By loosening the set-screw 24 the rod or auxiliary member 22 can be moved longitudinally, thus permitting it to be adjusted according to the size of the sack to be filled. After it has been adjusted to the proper place the set-screw can again be tightened thus holding it in the adjusted position.

When in operation the frame 10 is placed beneath the outlet spout of a bin or any other suitable receptacle which does not need to be shown and is suspended by the arms 11 in any suitable manner. This frame 10 will therefore form a hopper or funnel member for receiving the grain and guiding the same into the sack suspended beneath the frame. The sack is placed beneath the frame 10 with its open mouth stretched and suspended from the pointed outer end portions of the four pawls 17, two of which are provided at each end of the frame 10 as shown in Fig. 2. While the sack is being filled the latch which engages the inner ends of the pawls will hold the pawls in the set position shown in Fig. 2 and thus the sack will be prevented from dropping to the floor as the weight of the grain in the sack increases. As soon as the
sack is filled the latch is swung to a released position with one hand the edge portion of the sack is grasped with the other hand. When the latch moves out of engagement with the two pawls upon one side of the frame the weight of the sack will tip the pawls and the sack will drop to the ground beneath the frame. The weight of the inner ends of the pawls will then return the pawls to the position shown in Fig. 2 and upon releasing the handles 15 of the latch the latch will swing to the position shown in Fig. 1 thus engaging the inner ends of the pawls and holding the pawls in a set position. Since the pawls are rigidly connected with the cross bars 16 the cross bars will rotate with the pawls and therefore the pawls at both sides of the frame will move together and release both sides of the sack simultaneously. It is of course obvious that when filling the sack the cross bars must be longitudinally adjusted according to the size of the sacks to be filled, the adjustment being accomplished by releasing the set screws 24 and drawing the auxiliary sections 22 outwardly as indicated in the dotted line in Fig. 1 and again tightening the set screws or if the pawls upon the opposite sides of the frame are too far apart to accommodate the sack by moving the auxiliary sections inwardly to the position shown in full lines in Fig. 1. It will therefore be seen that this device can be used for suspending sacks of various sizes beneath the frame or hopper.

What is claimed is:
1. A sack holder comprising a frame, pivot ears extending from said frame, cross bars rotatably mounted between said pivot ears, each of said cross bars comprising a tubular major member having its outer end portions reduced to form a bearing and abutment shoulder, an auxiliary member slidably mounted in said major member, and engaging said auxiliary member to releasably hold the same in an adjusted position, and means for engaging the 50 pawls upon one side of said frame to releasably hold said pawls and cross bars in a set position.

2. A sack holder comprising a frame, pivot ears extending from said frame, a 55 cross bar rotatably carried by said pivot ears, said cross bar comprising a major member and an auxiliary member slidably mounted in said major member, the end portion of said major member being reduced to 60 form a bearing and an abutment shoulder engaging the pivot ear through which said bearing passes, pawls rigidly mounted upon the outer end portions of said major and auxiliary sections, means for releasably 65 holding said auxiliary section in a longitudinally adjusted position, and means for engaging the pawl of said major section to releasably hold the pawls in a set position.

3. A sack holder comprising a frame, a 70 cross bar rotatably carried by said frame, said cross bar comprising a major member and an auxiliary member adjustably connected with said major member and extending beyond said frame, pawls rigidly secured to the end portions of said cross bar to cause said cross bar and pawls to move together and means for releasably holding said pawls in a set position.

4. A sack holder comprising a frame, a 75 cross bar rotatably connected with said frame, said cross bar comprising a rotatably mounted major member and an auxiliary member adjustably connected with said major member for longitudinal adjustment, 80 pawls rigidly connected with said cross bar, and means for engaging said pawls for releasably holding the same in a set position.

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

HARRISON I. MOORE.

Witnesses:
Gertrude M. Moore,
E. J. Morse.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."