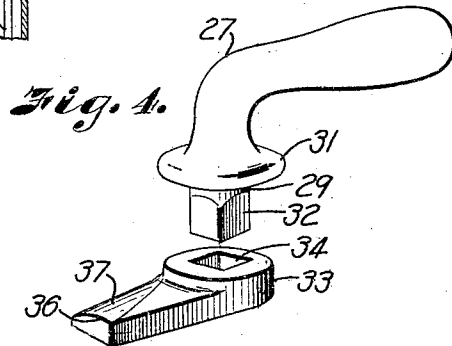
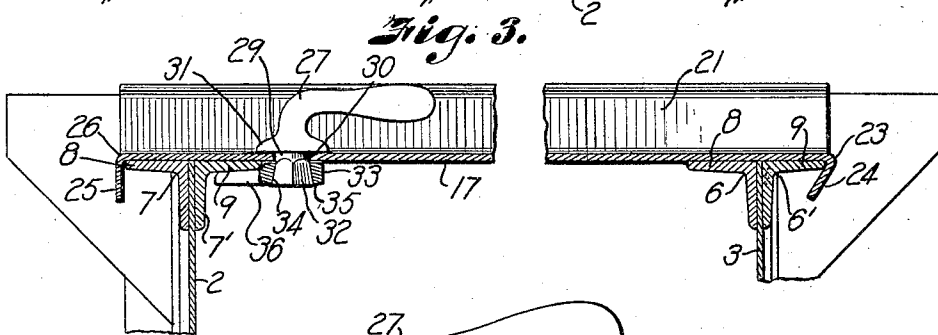
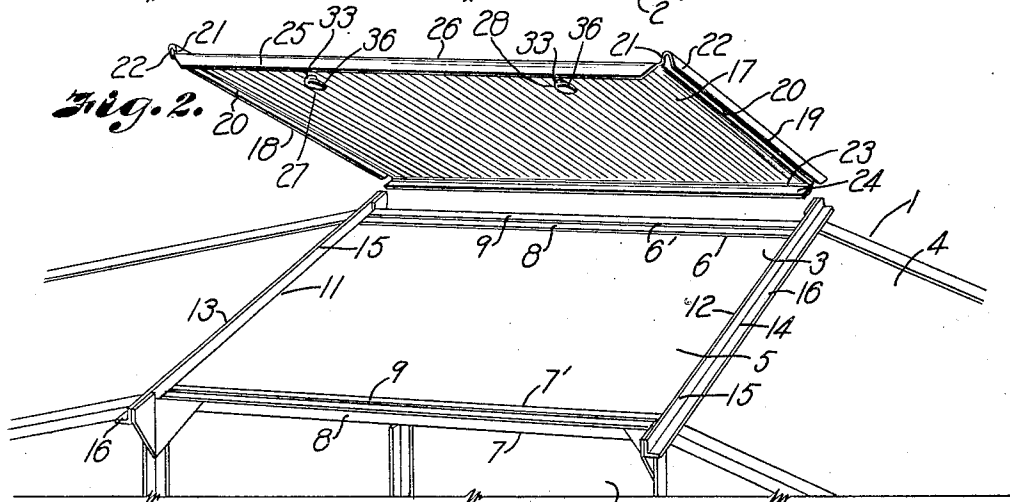
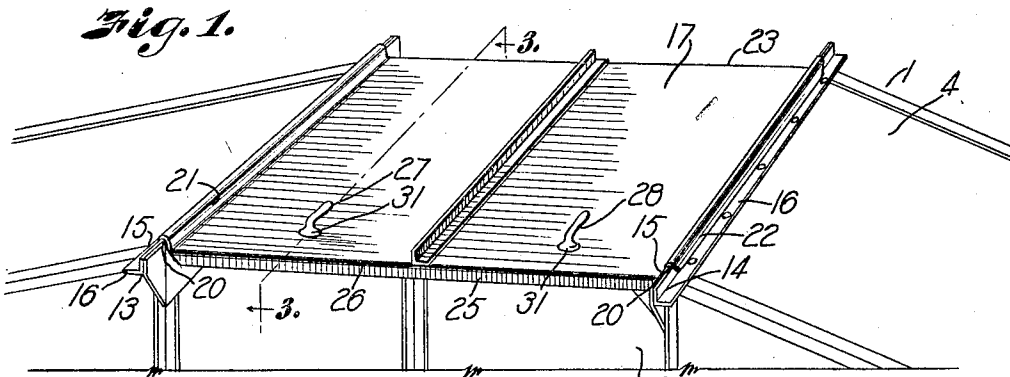


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T. N. PIERSON
SEPARATE DECK COVER
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SEPARATE DECK COVER

Application filed February 11, 1929. Serial No. 339,237.

My invention relates to deck covers and more particularly to a device of this character for closing the hatchway of a grain separator or like machine; the principal object of the invention being to provide a cover which will effectively close the hatchway but which may be easily removed to provide access to the interior of the separator.

In accomplishing this and other objects of the invention, I have provided improved details of structure the preferred forms of which are illustrated in the accompanying drawings, wherein:

Fig. 1 is a perspective view of a portion of a standard type of separator illustrating a deck cover embodying my invention.

Fig. 2 is a similar view illustrating the cover removed from the hatchway.

Fig. 3 is a sectional view through one of the clamping latches, on the line 3—3, Fig. 1.

Fig. 4 is a detail perspective view of one of the clamping latches.

Referring in detail to the drawings:

1 designates a separator housing comprising side walls 2 and 3 and a top deck or roof 4 having a rectangular-shaped hatchway opening 5 therein. The walls 2 and 3 are provided adjacent the opening 5 with pairs of angles 6—6' and 7—7', one angle of each pair being secured to the upper outside edge and the other of the pair to the inside edge of the side walls, with the horizontal flanges 8 and 9 of each pair extending outwardly from the side walls to provide a wide bearing for the cover closing the hatchway opening.

The opening 5 preferably extends entirely across the separator housing and the side edges 11 and 12 of the opening are preferably reinforced by angle members 13 and 14 with their vertical flanges 15 flush with the edges of the opening and the horizontal flanges 16 overlying the roof deck, the horizontal flanges being tightly riveted thereto to make a water tight joint.

A cover 17 for the hatchway preferably comprises a single sheet metal plate having the shape of the deck opening and provided along its side edges 18 and 19 with grooves 20 for receiving the vertical flanges 15 of the angles 13 and 14, the grooves being prefer-

ably formed by breaking the side edges of the sheet upwardly as at 21 and then downwardly as at 22, with the breaks thus formed spaced apart to receive the angles.

The rear end edge 23 of the sheet is preferably broken downwardly at an acute angle with the under face of the sheet to provide a hook-shaped flange 24 for engaging under the out turned flange 9 of the angle 6' on the outer back side of the separator housing; and the front end edge of the sheet is broken downwardly at right angles with the sheet to provide a lip 25 for overlying the front edge of the angle on the front side of the separator housing. Thus when the cover is placed in position over the deck opening the grooves 20 formed at the sides of the sheet receive the vertical flanges of the angles 13 and 14 to prevent longitudinal movement of the cover on the separator housing and at the same time provide a water tight joint with the deck cover.

The flanges formed at the front and rear ends of the cover engage over the edges of the horizontal flanges of the angles 7 and 6' to lock the cover against lateral movement on the separator housing.

With the above construction the cover is locked from movement in the plane of the roof deck but the forward end edge 26 of the cover may be lifted upwardly, with rear end edge 23 pivoting on the flange of the angle 6', at the rear side of the separator housing, until the front flange has cleared the separator housing, whereupon the cover may be slid laterally of the housing to unhook the flange from engagement with the angle 6', after which the cover may be lifted from the hatchway opening. The cover may be replaced by reversing the operations of removal.

In order to clamp the cover in position on the deck to prevent it from accidental removal, I provide latches 27 and 28 each comprising a shaft 29 rotatably mounted in an opening 30 in the cover and having a flanged head 31 on the upper end thereof for engaging the upper surface of the cover. The lower end of the shaft is squared as at 32 to attach a keeper plate 33 for engaging under

the flange of the angle 7' as best shown in Fig. 3, the keeper plate having a squared opening 34 to receive the shaft and the end of the shaft being peened over as at 35 to secure the plate. The forward edge 36 of the plate is beveled as at 37 so that it will more readily engage under the flange of the angle when the plate is turned to latch the cover on the housing.

From the foregoing it is apparent that I have provided a substantially weather tight cover which cannot be accidentally displaced and which will safely support the weight of the thresherman when walking over the deck of the separator.

What I claim and desire to secure by Letters Patent is:

1. In combination with a housing having a rectangular-shaped hatchway opening and outwardly projecting flanges at opposite sides of the opening and having vertical flanges projecting from the housing adjacent the other two sides of the opening, a cover for the opening having its side edges bent to form grooves for receiving the vertical flanges and downturned flanges for engaging over said horizontal flanges.

2. In combination with a housing having a rectangular-shaped hatchway opening and outwardly projecting flanges at opposite sides of the opening and having vertical flanges adjacent the other two sides of the opening, a cover for the opening, having grooves formed therein for engaging the vertical flanges, a hook-shaped flange engaging under one of the horizontal flanges, and means opposite the hook-shaped flange for latching the cover.

3. In combination with a housing having a rectangular-shaped hatchway opening and outwardly projecting flanges at opposite sides of the opening and having vertical flanges projecting from the housing adjacent the other two sides of the opening, a cover for the opening having its side edges bent upwardly and then downwardly forming grooves for receiving the vertical flanges and downturned flanges for engaging over said horizontal flanges, and means for latching the cover.

4. In combination with a housing having a rectangular shaped hatchway opening, angle bars fixed to the sides of the housing and having flanges projecting laterally of the housing, reinforcing angle bars extending across the housing adjacent the opening and having one of their flanges fixed to the housing and the other projecting therefrom to form a water stop, a cover for the opening having its side edges bent to form grooves for receiving said water stopping flanges and downturned flanges for engaging over the laterally projecting flanges.

In testimony whereof I affix my signature.

TORVALD N. PIERSON.