W. S. THOMPSON.

GRAIN BIN.

APPLICATION FILED JAN. 27, 1908.

926,366. Patented June 29, 1909.

2 SHEETS—SHEET 1.

Fig. 2.

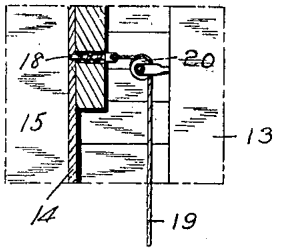
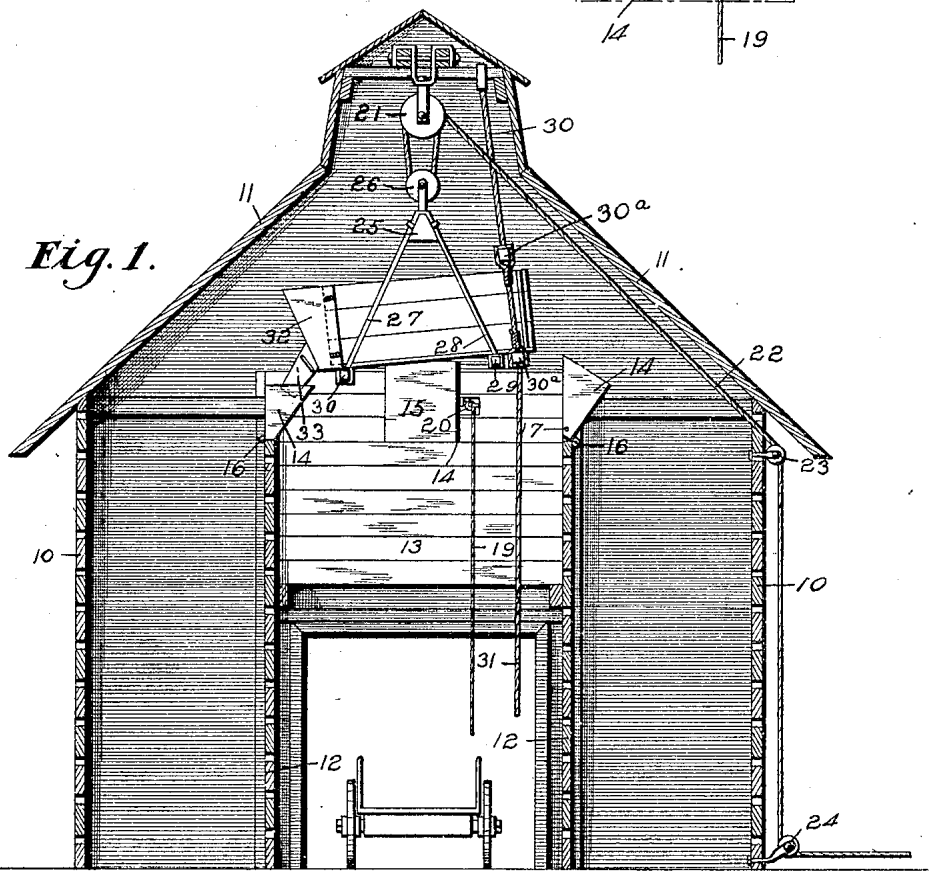


Fig. 1.



Witnesses.

F. C. Dahlberg.

M. E. Bennett.

Inventor.

William S. Thompson

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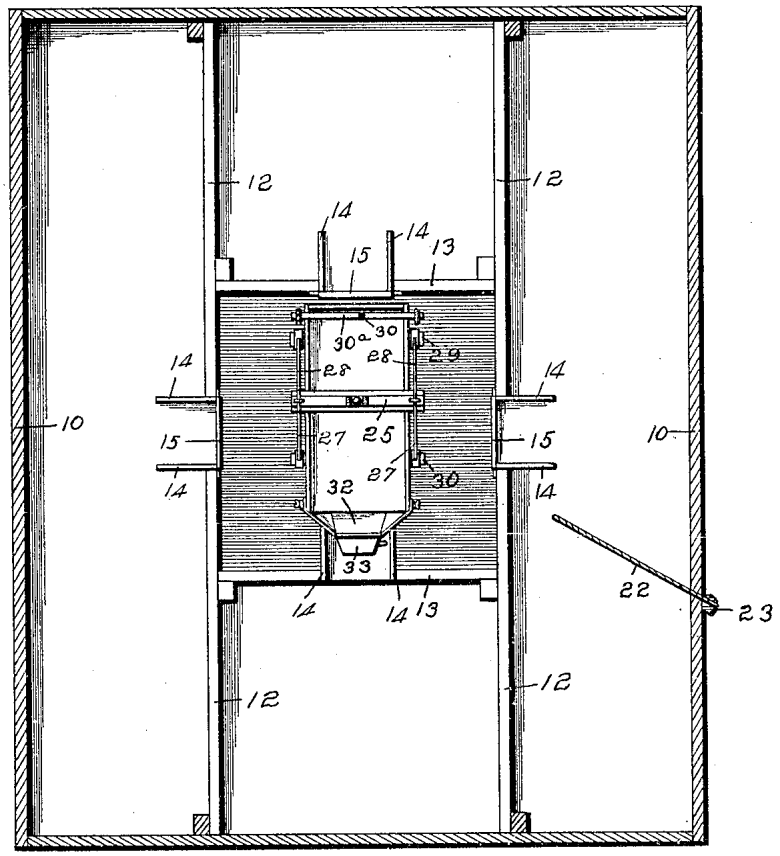
2 SHEETS—SHEET 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM S. THOMPSON, OF WYANET, ILLINOIS.

GRAIN-BIN.

No. 926,366. Specification of Letters Patent. Patented June 29, 1909.

Application filed January 27, 1908. Serial No. 412,815.

To all whom it may concern:

Be it known that I, WILLIAM S. THOMPSON, a citizen of the United States, residing at Wyanet, in the county of Bureau and State of Illinois, have invented a certain new and useful Grain-Bin, of which the following is a specification.

The object of my invention is to provide a device of this kind of simple, and inexpensive construction, and so arranged that it may be quickly and easily filled with grain by hauling the grain into the bin in wagons, and then bodily elevating the wagon beds and discharging them into different parts of the bin, until the bin is full, and further to provide improved tilting chutes for the various receiving points of the bin whereby grain from a wagon bed may be conducted into the portion of the bin designed to receive it.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claim and illustrated in the accompanying drawings, in which—

Figure 1 shows a vertical central sectional view of a grain bin embodying my invention. Fig. 2 shows an enlarged detail sectional view illustrating the latch device for releasing the tilting chutes, and Fig. 3 shows a horizontal sectional view taken on a line below the roof, and showing the arrangement of the chutes in the bin.

Referring to the accompanying drawings, I have used the reference numeral 10 to indicate the outer walls of the bin which is substantially rectangular, and which support a roof 11. Parallel with two of the outer walls are two inner walls 12 extending from one end to the other, and arranged at right angles between these walls are the inner walls 13; thus forming two long compartments at the sides of the bin, and two short compartments at the ends thereof. The compartments at the ends are each provided with a passage-way through which a loaded wagon may be driven to the space between the inner walls, one of said passage-ways being shown in Fig. 1.

At the top central portion of each inner wall I have provided a tilting grain chute comprising substantially triangular sides 14, and a bottom 15. The chute is connected by hinges 16 with the inner wall, and the lower portions of the sides are shaped to rest against the adjacent portion of the inner wall, to limit the inward movement of the upper end of the chute, as shown to the left in Fig. 1. And when in said position, grain dumped into the top of the chute will be conveyed into the compartment of the bin with which said chute is connected. When in said position, the upper end of the chute also projects out over the central opening between the inner walls far enough to interfere with the passage of a wagon bed upwardly to a point above the chute, and therefore when a wagon bed is being elevated, it will engage the chute and move it to the position shown to the right in Fig. 1, then as soon as the wagon has passed above it, it will drop by gravity to the position shown to the left of Fig. 1, and be ready to receive grain discharged from the wagon bed.

I have provided for holding these chutes in their tilted positions as shown to the right in Fig. 1, as follows: One of the side pieces 14 of the chute is provided with an opening 17, and the inner wall to which the chute is hinged is provided with a spring actuated slide bolt 18 designed to enter the opening 17 when the chute is in its tilted position. Connected with the slide bolt is a rope 19 which passes over a pulley 20 and extends downwardly to a point where the operator may grasp it and thus release the slide bolt from the chute, and permit the chute to drop by gravity to its normal position, as shown to the left in Fig. 1. By this arrangement, any one of the chutes may be placed in its normal position by pulling upon the rope 19, or it may be placed in its tilted position by elevating the wagon bed past it, and thus moving it to its tilted position, where it will be automatically held and locked by the slide bolt.

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

An improved grain bin, comprising outer and inner walls forming compartments between them, said inner walls forming a space between them into which a wagon may be driven, and a tilting chute arranged at the top of each inner wall, in one position being substantially in line with the inner wall, and in another position being inclined inwardly to the position designed to receive material and to conduct it into the compartment below it, each chute being formed with an

opening in one of its sides, a slide bolt connected with the inner wall adjacent to said opening, and a rope connected with said slide bolt, said parts being so arranged that when the chute is moved to its tilted position, the slide bolt will enter the opening and lock the chute, and when the slide bolt is removed from the opening, the chute will drop by gravity to its normal position.

Des Moines, Iowa, Dec. 3, 1907.

WILLIAM S. THOMPSON.

Witnesses:

D. R. CHARLES,

JAMES L. PECK.