A. SMITH.

Grain-Dumping Device.

No. 199,112. Patented Jan. 8, 1878.

Fig. 1.

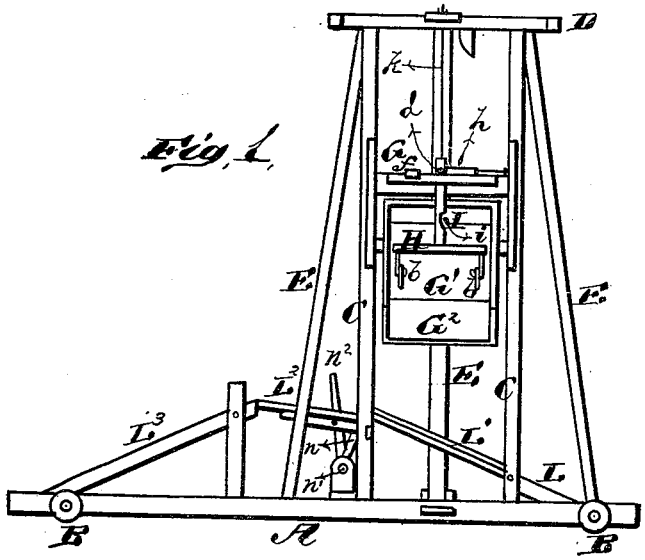


Fig. 2.

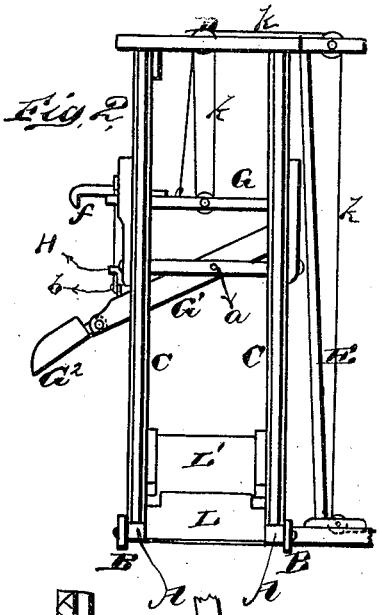


Fig. 3.

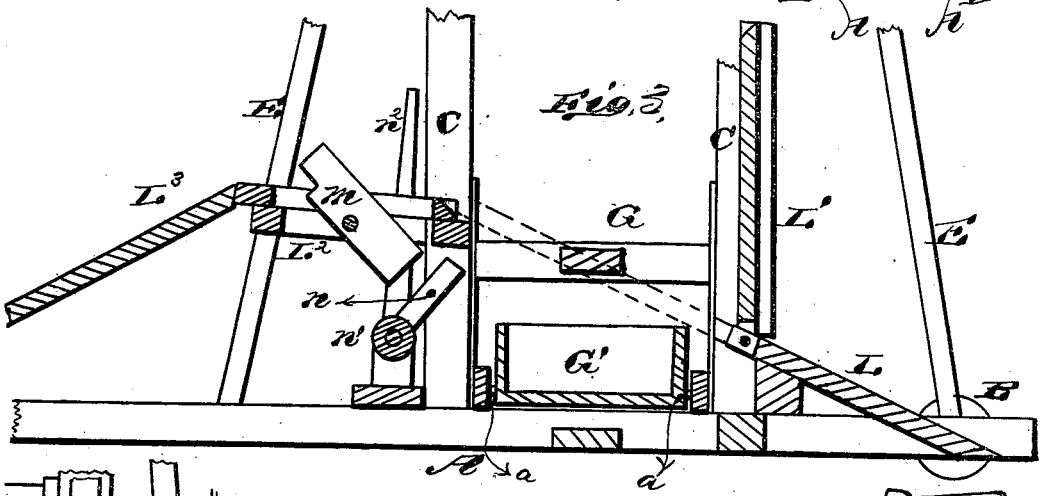
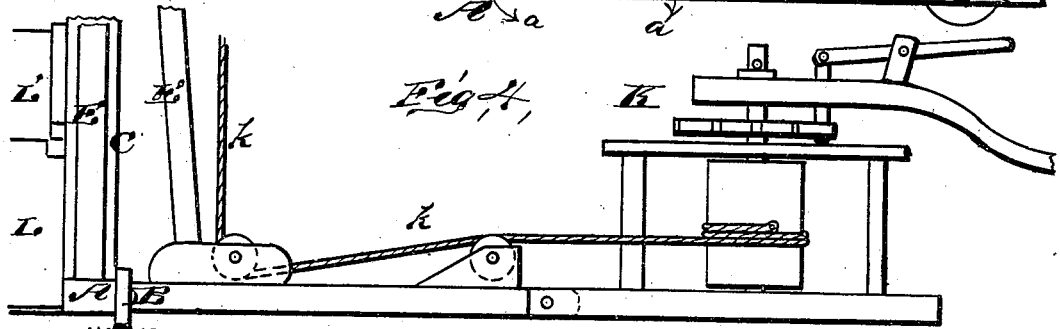


Fig. 4.



WITNESSES

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ABRAHAM SMITH, OF WHEELER'S GROVE, IOWA.

IMPROVEMENT IN GRAIN-DUMPING DEVICES.

Specification forming part of Letters Patent No. **199,112**, dated January 8, 1878; application filed September 1, 1877.

To all whom it may concern:

Be it known that I, ABRAHAM SMITH, of Wheeler's Grove, in the county of Pottawattamie and State of Iowa, have invented a new and valuable Improvement in Grain-Dump; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my grain-dump. Fig. 2 is an end view. Fig. 3 is a sectional detail; and Fig. 4 is a detail thereof.

The nature of my invention consists in the construction and arrangement of a machine for transferring corn and grain from wagons to a crib, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

A A represent two parallel bed-sills, of suitable length, connected by cross-bars and mounted upon rollers or wheels B B, so that the entire machine may be moved from place to place as required.

Upon the sills A A are erected four uprights, C C, connected at the top by a frame, D, and held firmly in proper position by means of braces E E, substantially as shown.

The uprights C form ways, between which a frame, G, is moved up and down, said frame containing the transfer-box G^1. This box is hung upon pivots or journals *a a* in the frame G, and its front end provided with a cross-bar, H, connected to it by links *b b*. This cross-bar has a vertical bar, I, extending upward through a cross-bar in the frame G, with a pin, *d*, through its upper end. This pin limits the downward movement of the front end of the box, and holds it in a proper position for the discharge of the corn or grain therein. The front of this transfer-box may be raised, and the box held in a horizontal position by means of a spring-latch, *h*, entering a notch, *i*, in the bar I. By simply pressing back this latch the front of the box will fall down until the pin *d* strikes the cross-bar of the frame G.

At the front of the box G^1 is hinged a chute or mouth, G^2, which may be thrown up and fastened by a latch, *f*, while transferring the grain.

The frame G is operated by means of a windlass, K, from which a rope or chain, *k*, passes over and around pulleys, substantially as shown in Fig. 4.

Between the bed-sills A A is arranged a sort of bridge, over which the wagon passes to dump the load into the transfer-box G^1. This bridge consists of an upward incline, made in two parts, L and L^1, a horizontal platform, L^2, and a downward incline, L^3.

The part L of the first incline is stationary, and reaches to the first set of uprights. The other part, L^1, of this incline reaches to the next set of uprights, and is hinged at its lower end, so as to be thrown upward in a vertical position and allow the transfer-box to descend below the platform L^2. In this platform are two dumping-bars, *m m*, which are held in a horizontal position, flush with the upper surface of the platform, by means of arms *n n* projecting from a rocking bar or shaft, n^1, operated by a lever, n^2.

The wagon is driven up the inclines L L^1 onto the platform L^2. The incline L^1 is then raised and the transfer-box lowered with its frame, it being, of course, understood that at this stage of the operation the box G^1 is horizontal in the frame G and the mouth G^2 raised and held by its latch.

The hind wheels of the wagon being placed on the dumping-bars *m m*, the arms *n n* are withdrawn and the wagon dumps so as to deposit its load in the transfer-box. As soon as this is done the wagon is driven down the incline L^3, which raises the bars *m m*, and the arms *n n* are at once turned under the same.

The transfer-box is then, by means of the windlass and rope, raised to the desired height, and the contents then discharged, as above described. The incline L^1 is let down and the next load driven onto the platform L^2, and the same operation repeated.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a machine for transferring grain, a movable frame, G, having a transfer-box, G^1, hung upon journals *a a* in the frame G, and its

front end provided with a cross-bar, H, in combination with a vertical bar, having a pin, *d*, substantially as and for the purpose set forth.

2. The combination of the frame G, the journaled box G^1, with hinged mouth G^2, T-shaped arms H I, with pin *d*, spring-latch *h*, and latch *f*, all substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ABRAHAM SMITH.

Witnesses:
G. B. OTTO,
THOMAS SHEET.