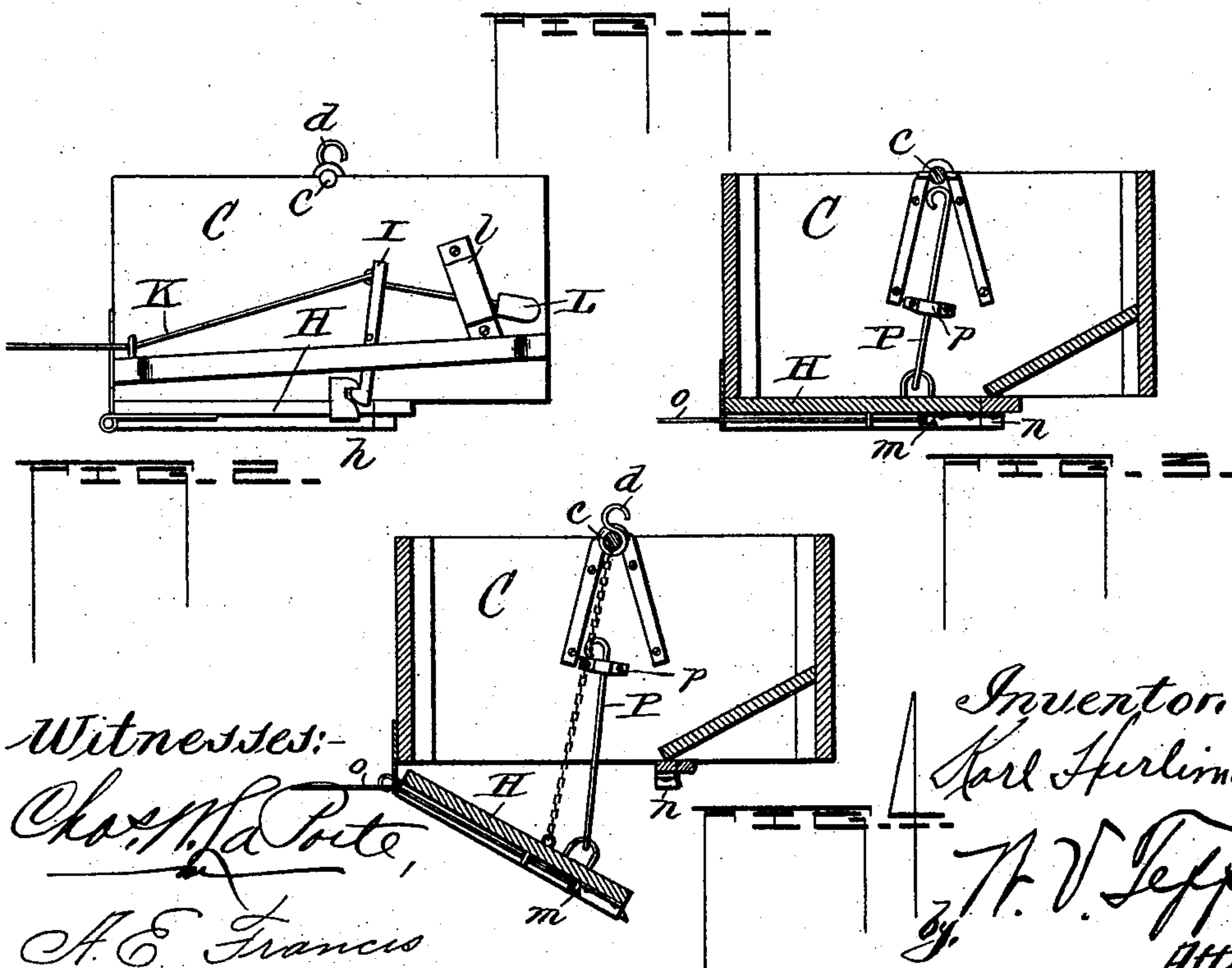
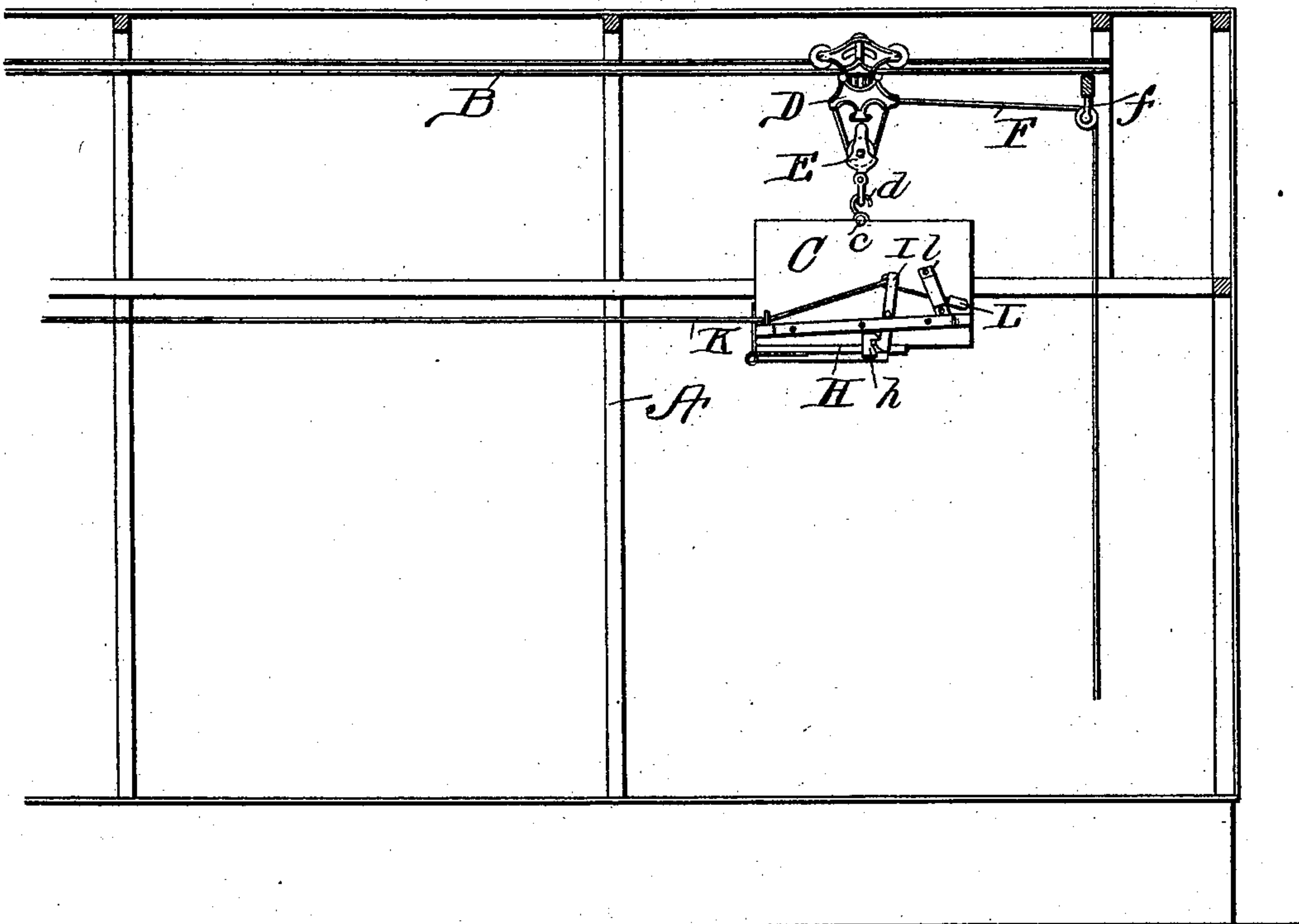


(No Model.)

K. HURLIMAN.
GRAIN CONVEYER.

No. 599,785.

Patented Mar. 1, 1898.



Witnesses:
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UNITED STATES PATENT OFFICE.

KARL HURLIMAN, OF RANKIN, ILLINOIS.

GRAIN-CONVEYER.

SPECIFICATION forming part of Letters Patent No. 599,785, dated March 1, 1898.

Application filed March 9, 1897. Serial No. 626,674. (No model.)

To all whom it may concern:

Be it known that I, KARL HURLIMAN, a citizen of the United States, residing at Rankin, in the county of Vermilion and State of Illinois, have invented certain new and useful Improvements in Grain-Conveyers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in grain-conveyers by means of which a simple device is provided that will materially aid in conveying grain from wagons to cribs or other receptacles purposed to receive the same.

More particularly my invention relates to a conveyer especially designed to be used by farmers in delivering the corn, either shelled or in the ear, from wagon-beds or other sources to cribs or bins purposed to contain the same, and by the use of my device I provide a simple and cheap means of effecting this conveying of the grain.

My invention consists, essentially, of a box or receptacle for receiving the grain and of a track for receiving a traveling support which is connected with the said box or receptacle, the said track running from the point of receiving the deposits of grain in the receptacle to the various points where it is purposed that the same shall be delivered. This track may be mounted in such a way as to extend over the cribs or bins purposed to receive the grain, and in carrying out the invention I provide the necessary ropes and pulleys to elevate the box or receptacle and to convey it by means of a suitable application of power to the said rope to the point or points it is desired that the grain shall be delivered.

My invention further consists in providing the box or receptacle with a hinged door and with means for locking the same to close up the box and for releasing the door for the purpose of providing an exit-opening for the grain to facilitate in the discharge of the same into the crib or bin, and I provide, in connection with the said catch for engaging the door, a rope or suitable cord connected with the said catch and extending to any desired point where a person may operate the said catch by pulling the rope to release the door when it is desired that the grain shall be discharged from the box or receptacle. This

rope is supposed ordinarily to extend to the wagon or other supply-point where the grain is received and deposited in the box or receptacle; and my invention further consists in various details of construction hereinafter more particularly described, and pointed out in the drawings.

I deem it unnecessary to show the complete mode of operating the device, but have shown enough to fully illustrate the principle of its operation.

That my invention may be more fully understood reference is had to the accompanying drawings, in which—

Figure, 1 shows an elevation of crib or a series of bins purposed to receive deposits of grain. Fig. 2 is a side view of my receptacle or box. Fig. 3 shows a section through the same and also shows in detail a particular catch which I may use in connection with the box. Fig. 4 is also a sectional view showing the box with the door open.

In the figures, A shows in a general way a crib or series of bins purposed to receive deposits of grain.

B is a track running over and extending across the top of the crib or bin.

C is the box or receptacle, which is provided with the cross-piece *c* and the hook *d*.

D refers generally to a carrier provided with pulleys for bearing upon the track and with the frame part E, connected with hook *d* on the box and provided with a small pulley, and is connected with the carrier D by means of the rope F, which said rope passes over the fixed pulley *f* and over other suitable pulleys, if necessary, and at its outer end receives the application of power—as, for instance, a horse—for drawing and elevating the box or receptacle.

Referring to the box or receptacle particularly, H is a door hinged to one end of the box and designed to fit perfectly in an opening in the bottom thereof and is provided with the lugs or catches *h*, designed to be engaged by suitable hooks.

I are pivoted bars, one being provided on each side of the box and each being provided with a hook at its lower end for engaging the lug or hook *h*.

K is a rope or cord connected with the upper end of hooks I and, as before stated, is designed to extend to the place where the grain is purposed to be deposited into the box

or receptacle, and when operated or pulled it will operate the bars I and release the door H to permit the discharge of the grain from the box or receptacle.

5 L is a weight connected with bars I, at the upper portion thereof, and is purposed to hold the said bars in position such as will cause them at all times to engage hooks *h* on the door when the same is closed. *l* is a clasp
10 extending over the weight to hold it in place.

In Figs. 3 and 4 I have shown a double catch, one at the bottom of the box. This catch consists of the sliding bolt *m* on the door H and the catch *n* on the box, and it may be provided with a spring of any suitable kind that
15 will project the said bolt forwardly, and I connect with the slide the rope *o*. In applying the device practically I only use one catch; but either one of those shown may be used.

20 In Fig. 3 I have shown the catch at the bottom of the box, and when I use this catch I may apply the rod P, which is connected with the door by means of the staple shown and hooked at the top, purposed to engage the
25 clasp *p* to catch and hold the door at the desired point, as particularly shown in Fig. 4, or, as shown in Fig. 4, I may dispense with the rod and use a chain in the manner illustrated in said figure.

30 In carrying out my invention a track is laid from a dump or a suitable incline, upon which a wagon is purposed to be driven which contains grain of any kind. The receptacle or box C is purposed to be placed in position to
35 receive grain from the wagon when the end-gate has been removed or dropped down, and when the box or receptacle is full by applying power to rope F the box will be elevated and conveyed to any point along the track B,
40 and when arriving at the point where it is desired that the grain shall be deposited the rope connected with the catch for releasing the door will be drawn, the door will drop down, and the grain will escape from the box or receptacle, and the box or receptacle will be drawn
45 back into position to receive another deposit of grain by means of the same rope that releases the catches. This operation is repeated continuously and the delivery made from the
50 wagon or other source of supply to the crib or bins until the same are full or the wagon or wagons empty.

My invention, as before stated, is especially adapted to be used by farmers and is of great
55 advantage to them. The method now commonly used is to scoop the grain from the wagon into cribs or other receptacles by hand labor and requires a great amount of hard work, which is overcome by the use of my
60 device, as it will be seen that horse-power may be employed to do practically all the work, and besides in the old or common way of scooping the grain into the receptacles or cribs it is impossible to build the cribs very
65 high; but by the use of my invention the cribs can be built up much higher, as it will be seen that the box may be elevated to almost any

height desired, and it may be deposited in such a manner as to fill up all the space in the crib, so that there is absolutely no vacant
70 space left.

In carrying out my invention I do not desire to be limited to the exact construction herein shown, but may modify the same in minor details as I may find it necessary in
75 applying the device to practical use.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an apparatus of the class described, 80 the combination, with the track B, running lengthwise the building and extending over and across the top of the crib or bins A, of a traveling receptacle for receiving grain and conveying it to points where it is designed to
85 be delivered, comprising the box C, with the cross-piece *c* and the hook *d*, purposed to be engaged by the frame part E on the carrier D, which bears upon said track, the door H hinged to one end of the said box and provided
90 with suitable lugs or catches *h*, designed to engage suitable hooks on the box, pivoted bars I, one on each side of the box provided at their lower ends with hooks for engaging the lugs or catches *h*, weights L, connected with
95 bars I, at their upper portion purposed to hold the said bars in position and at all times to engage with hooks *h*, on the door when the same is closed, rope K, connected with the upper end of bars I and extending to any desired point where a person may operate the
100 said catch by pulling the rope to release the door when it is desired that the grain shall be discharged from the box or receptacle, all substantially as described and shown. 105

2. In a grain-conveyer, the combination with the crib A, and track B, running over and extending across the top of the crib, of the box or receptacle C, provided with the
110 cross-piece *c*, and the hook *d*, the door H, hinged to one end of the box provided with suitable lugs or catches *h*, pivoted bars I, one on each side of the box and provided at their lower ends with a hook for engaging the lugs or hooks *h*, rope K, connected with the upper
115 ends of hooks I, and purposed when operated to release the door H, for depositing grain, weights L, connected with bars I, for holding the said bar in position to engage hooks *h*, the carrier D, traveling upon track B, having the frame part E, connected with hook *d*,
120 on the box, the hoisting or elevating rope F, passing over pulley *f*, and other suitable pulleys purposed for elevating and carrying the receptacle to any part desired that grain shall
125 be deposited, all substantially as described and shown.

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

KARL HURLIMAN.

Witnesses:

W. V. TEFFT,
CHAS. W. LA PORTE.