

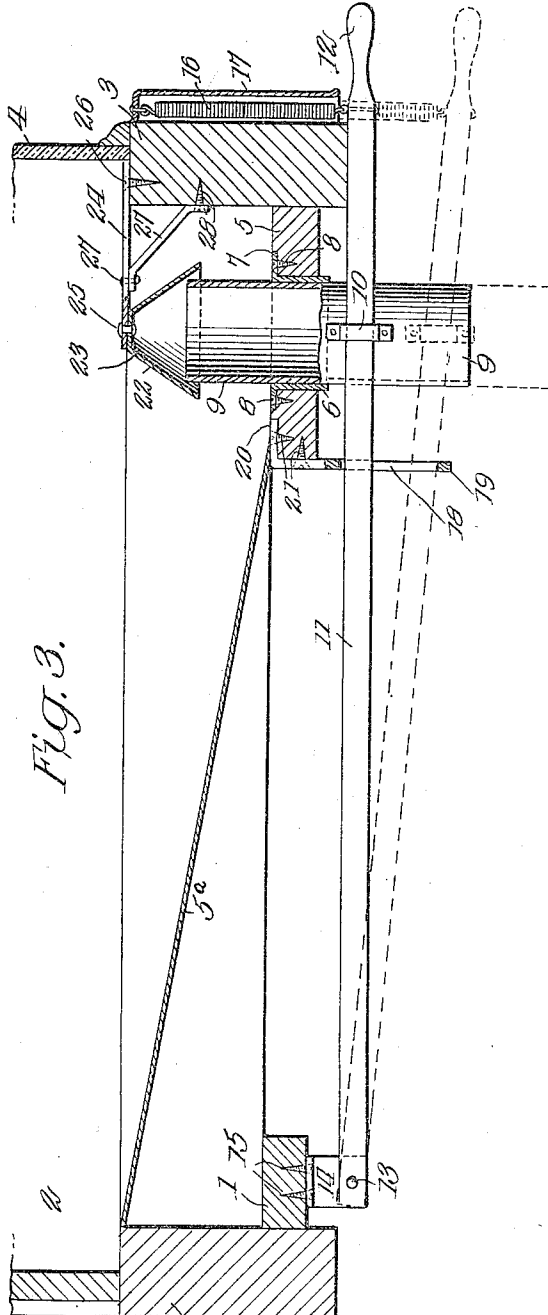
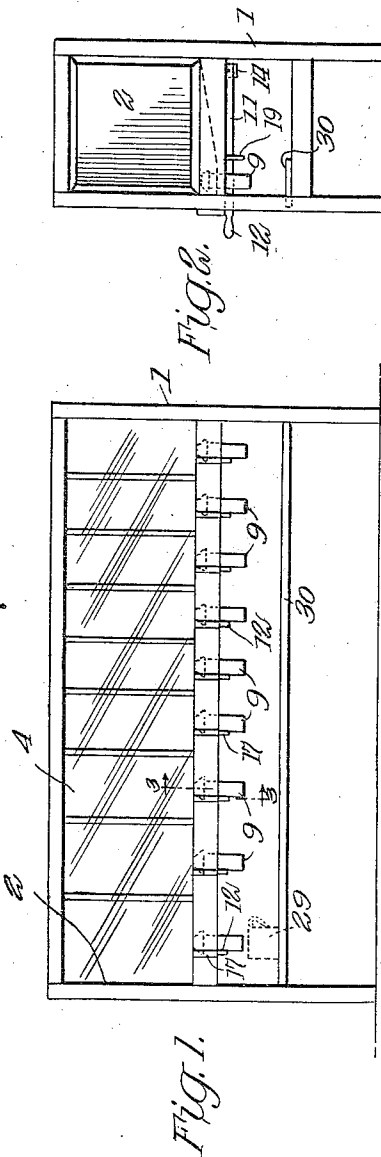
J. L. STEEL.

CUT-OFF.

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CUT-OFF.

1,144,259.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN L. STEEL, a citizen of the United States, and a resident of Wellston, in the county of Jackson and State of Ohio, have made certain new and useful Improvements in Cut-Offs, of which the following is a specification.

My invention is an improvement in cut-offs, and has for its object the provision of mechanism for use in connection with a bin or other holder for seed, grain or the like, so arranged that a portion of the contents of the bin or other receptacle may be withdrawn at any desired time, by merely pressing down upon a lever or handle, and wherein means is provided for retaining the mechanism normally in closed position, to prevent loss of the seed or grain.

In the drawings: Figure 1 is a front view of a receptacle having a plurality of compartments, each compartment being provided with the improved cut-off; Fig. 2 is an end view; and, Fig. 3 is an enlarged section on the line 3—3 of Fig. 1.

The present embodiment of the invention is shown in connection with a receptacle consisting of a frame 1, supporting a plurality of bins or holders 2 for the seed, the said holders being secured to longitudinally extending sills 3 supported by the frame, and each of the said holders or bins 2 is provided at its front with a sheet 4 of transparent material, as for instance glass, in order that the contents of the bin may be visible.

Each of the bins is provided with an inclined bottom 5^a, the said bottom inclining from the rear to the front of the bin, and at the front of each bin a plate 5 is arranged horizontally between the front end of the inclined portion of the bottom and the forward supporting sill. The plate 5 is provided with a cylindrical opening at approximately its center, and a bushing 6 is arranged within the opening, said bushing having its upper end flanged laterally at 7, and countersunk in the upper face of the plate 5, and secured to the said plate by screws 8 or the like. A short section of pipe 9 is mounted to slide in the bushing, each of the said pipes being of sufficient length to extend above and below the plate 5. Each of the said sections of pipe is provided on one side with a clip or stirrup 10, and a hand lever 11 engages the stirrup intermediate the end of the lever. The outer end of the lever

is formed into a grip 12, for convenience in handling the lever and the rear end is pivoted at 13 to an angle plate 14, the said angle plate being secured to the frame 1 by means of screws 15. A coil spring 16 has one of its ends connected with the end of the lever near the front thereof, and the upper end of the spring is connected to the top of a housing 17 which incloses the spring, the said housing being open at its lower end to permit the spring to be expanded when the lever is moved downward, as indicated by dotted lines in Fig. 3.

The lever is guided in its vertical movement, by means of a guide bar 19, the said bar having an angular lug 20 at its upper end, resting upon the plate 5 and countersunk in the upper face thereof, the said lug and the adjacent portion of the guide bar being secured to the plate by means of screws 21. The bar 19 is longitudinally slotted, as indicated at 18, and the lever 11 passes through the slot.

A frusto-conical hood 22 is arranged above the pipe 9 and co-axial therewith, the said hood having its open large end downward, while the upper small end is closed, as indicated at 23, and the hood is secured to the outer end of a bracket arm 24, by means of a rivet 25, the said rivet passing through the bracket arm and the top 23 of the hood. The bracket arm 24 is secured to the upper face of the front sill 3, by means of screws 26, and a brace 27 is arranged between the bracket arm and the inner face of the sill, the said brace being secured to the bracket arm by a rivet 27, and to the sill by a screw 28.

Each of the pipes 9 is the outlet pipe for the contents of the adjacent bin, and each of the said pipes is normally held in the position of Fig. 3 by the spring 16; that is with the upper end of the pipe covered by the hood and within the said hood, so that the seed or grain cannot enter the upper end of the pipe.

When it is desired to withdraw a portion of the contents of the bin, the front end of the lever 11 is depressed, the grip 12 being grasped, and the front end of the lever being pushed downward, as indicated in dotted lines in said figure. The pipe 9 moves with the lever, as also indicated in dotted lines, to move the upper end of the said pipe below the hood. As soon as the upper end of the pipe passes below the level of the grain,

or below the lower end of the hood, the grain will flow into the upper end of the pipe, and will flow through the pipe, into a receptacle 29 for instance, that may be placed below the
 5 lower end of the pipe. As soon as the lever is released, the spring will return the parts to the full line position of Fig. 3, moving the upper end of the pipe 9 into the hood, which prevents the entrance of seed or grain
 10 into the upper end of the pipe.

The inclined bottom 5^e causes the contents of the bins to move forwardly, onto the upper face of the plate 5, and it will be evident that the contents may be withdrawn,
 15 as long as they will flow into the upper end of the pipe. The bins may be filled completely, without interfering with the operation of the outlet mechanism, since the hood at any depth of the grain will always inclose
 20 and shield the upper end of the pipe when the pipe is in its upward normal position.

As shown in Figs. 1 and 2, the bins 2 are arranged in series alongside each other, and each of the said bins is provided with the
 25 improved outlet and cut-off mechanism. A shelf 30 is arranged below the lower ends of the pipes 9, the said pipes being arranged in a row directly above the shelf. The shelf is supported on the frame, and is designed
 30 to afford a support for the receptacles 29.

I claim:—

1. In combination, a container having an opening in its bottom, a bushing in the opening, a pipe having open ends movable
 35 through the bushing, a shield of frusto-conical shape arranged with its large end downward above the bushing, said shield being fixed and having its upper small end closed, the large end of the shield being of greater
 40 diameter than the diameter of the pipe, a lever pivoted to the container at the rear thereof and extending beyond the same at the front of the container, a stirrup on the pipe through which the lever passes, a
 45 spring normally holding the lever with the

pipe lifted, said shield being spaced to inclose the upper end of the pipe when the said pipe is lifted, and a housing for the spring.

2. In combination with a container having a plate in its bottom at the front thereof, said bottom provided with an opening, a bushing secured to the plate in the opening, a pipe having open ends fitting the bushing and movable in the bushing, a lever
 55 pivoted to the rear of the container and extending beyond the front of the container, a connection between the lever and the pipe for moving the said pipe, a shield secured to the container above the pipe and arranged to
 60 close the upper end thereof when the pipe is lifted, and a spring normally pressing the lever upward.

3. In combination with a container having an opening in its bottom, a bushing in the
 65 opening, a pipe having open ends fitting the bushing and movable in the bushing, a substantially conical shield fixed in the container above the upper end of the pipe and adapted to receive the said end to close the
 70 pipe when the pipe is in its uppermost position, a lever pivoted to the container and connected to the pipe for moving said pipe, said lever extending beyond the front of the container, and means for normally holding
 75 the lever with the pipe lifted.

4. In combination with a container having an opening in its bottom, a bushing in the opening, a pipe having open ends fitting the bushing and movable in the bushing, a
 80 substantially conical shield fixed in the container above the upper end of the pipe and adapted to receive the said end to close the pipe when the pipe is in its uppermost position, means for moving the pipe, and a
 85 spring normally holding the pipe lifted.

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Witnesses:

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