

C. E. PENROD.
 SACK HOLDER FOR GRAIN CHUTES.
 APPLICATION FILED JULY 13, 1914.

1,154,722.

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Fig. 1.

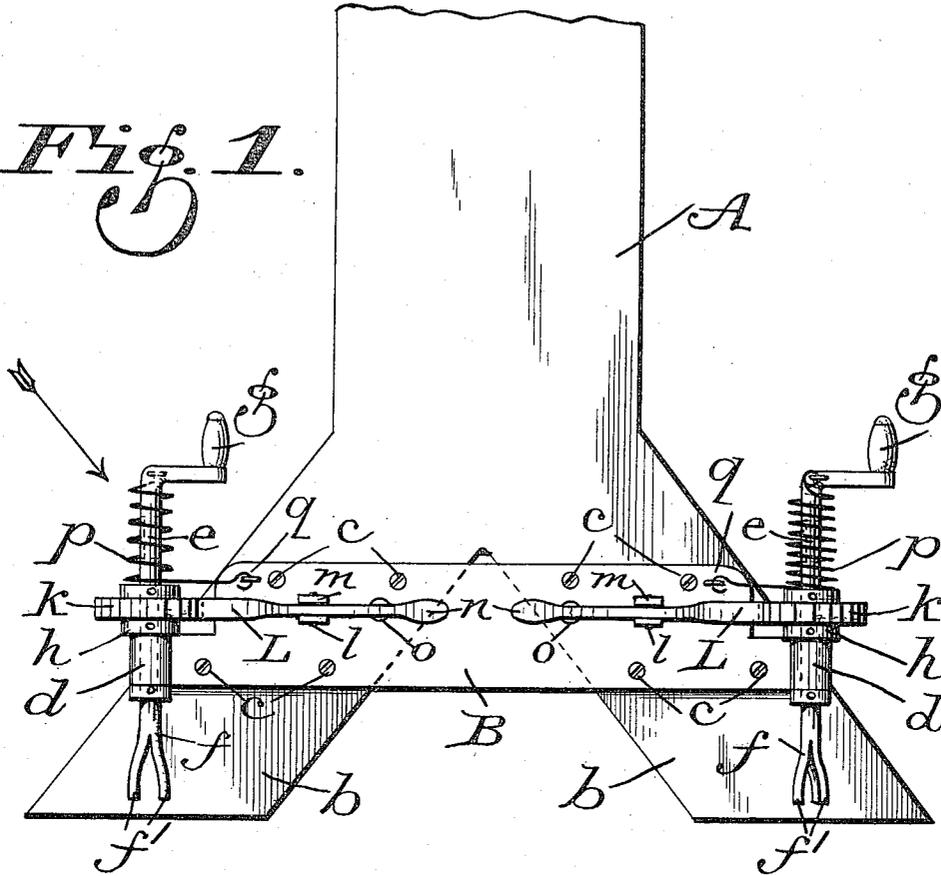
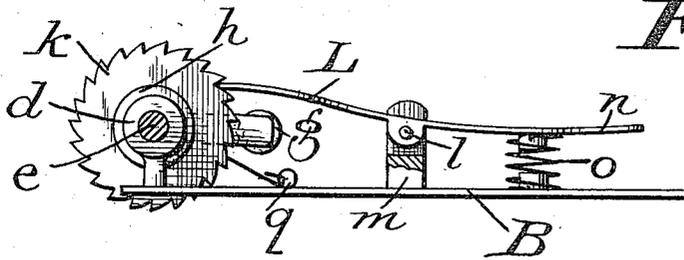


Fig. 2.



Inventor

Witnesses
 Anna K. Burnham.
 David E. Lewis.

Chas. Edward Penrod,
 By Frank M. Burnham
 Attorney.

UNITED STATES PATENT OFFICE.

CHARLES EDWARD PENROD, OF CONCORD TOWNSHIP, MIAMI COUNTY, OHIO.

SACK-HOLDER FOR GRAIN-CHUTES.

1,154,722.

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To all whom it may concern:

Be it known that I, CHARLES EDWARD PENROD, a citizen of the United States, residing in Concord township, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Sack-Holders for Grain-Chutes, of which the following is a specification.

While this invention appertains to sack-holders generally; my present invention more particularly and specifically relates to the class of "sack-holders for grain-chutes."

Some of the principal objects of this invention, consist in providing a means or device for more readily and easily holding and retaining a sack on a grain chute while filling same, more firmly than heretofore; and in such a manner that it will be impossible for said sack to become detached or slide off therefrom, by reason of the action of the grain in passing or pouring into said sack, also by reason of the jar and vibration caused by the action of the machinery, or in fact through any cause whatsoever.

Further objects are to provide a device as above referred to, that can be easily and quickly manipulated or operated; is simple in construction and will seldom need repairing; and one that can be manufactured at a small cost.

This invention consists essentially,—referring briefly and in general terms—to the structure covering my sack-holder for grain-chutes; of the very peculiar combination, arrangement and construction of the various parts or mechanical elements which combine to make up the device, and the minor details thereof; all of which will hereinafter be fully and specifically described, and set forth in the subjoined claim.

Referring to the accompanying drawings illustrating my invention, and constituting a formal part of this specification, and wherein the same letters of reference are utilized to refer to and point out the same parts wherever occurring throughout the several views, Figure 1 is a front elevation of the broken away discharge end of a grain chute, showing my sack-holders properly attached to the divided ends or branches of said chute: and Fig. 2 is a side view of one of my sack-holders as shown in Fig. 1,—but on a slightly enlarged scale therefrom.

In describing my said invention specifically, and referring in detail to the various parts or mechanical elements of construction

which combine to make up my sack-holder for grain-chutes, as shown throughout the several views of the drawings and indicated therein by means of the characters of reference as aforesaid: A refers to a grain-chute—which is here shown as broken away,—but which may be leading from an elevator; mill; separator;—or in fact any source of supply of flowing grain; the interior of which is of course provided in the usual manner with any suitable style of shifting grain board or movable partition wall,—(not necessary to be here shown as it is no part of this invention)—by which the flow of grain may be shifted and made to pass out of either of the discharge branches or arms *b* of said chute into the sacks as desired. Chute A is here shown of the ordinary style and construction having its discharge branches *b* formed straight, but it will be obvious and readily understood, that said branches may be curved, and that said chute may be of any suitable style, as the chute itself is no part of my invention, and my sack-holders are susceptible of being fitted to any style of chute.

As fully and clearly shown in Fig. 1, my sack-holders are both alike in construction, but the position of the pawl and some of the parts are slightly transposed in one holder from the other holder, this being necessary so as to allow them to rest on the supporting plate or base B, in the proper position to adapt one of the holders for each of said branches or arms of the chute.

Supporting-plate or base B is securely attached or connected to the branches *b* of said chute, by screws *c* or otherwise; and extending or projecting therefrom are the bearings *d*, in each of which is revolubly fitted a shaft *e* formed with a forked or bifurcated end *f*, which is of a suitable size to receive between the prongs *f*¹ thereof, a double-fold or lap of the mouth of the sack,—not necessary to be here shown;—but which in practice, as can readily be understood; is passed over the mouth or end of each discharge branch *b*, and by means of crank-handle *g*—at opposite end of shaft *e*,—said shaft may be turned so as to make a partial revolution—which is all that is required,—and which will cause prongs *f*¹—of said forked end—as it turns, to grasp, grip and twist the mouth of the sack so that said sack will bind and hold firmly and securely around the end or mouth of said discharge branch.

Shaft *e* is retained in position in bearing *d*, by means of a hub *h* and the hub of a ratchet-wheel *k*, both of which are rigidly mounted upon said shaft.

5 The teeth of ratchet-wheel *k* receives the end of pawl *L*—which is in the form of a lever,—having its fulcrum or pivotal bearing *l* in post *m*, extending from the supporting or base plate *B* as more particularly
10 shown in Fig. 2; and by simply pressing down the free end *n* of said pawl; spring *o*, located between and having its bearings against said pawl and said supporting plate, and which holds each pawl in position;
15 will now be compressed allowing the opposite end of said pawl to be thrown upward and out of engagement with the teeth of ratchet-wheel *k*, when the sack held by prongs *f'* of the bifurcated end *f* of said
20 shaft, can be disengaged or released from their hold on said sack, by simply turning shaft *e* by means of its crank-handle *g*, when said sack which is now filled with grain can be removed from the discharge branch or
25 arm *b*.

A spring *p* is wound around shaft *e* between the crank-handle *g* and the hub of ratchet-wheel *k*, one end of which is secured thereto near the crank-handle, while its opposite end is suitably connected at *q* to the
30 supporting-plate *B* as clearly shown; and exerts the requisite amount of tension on said crank-handle when turning same, and

holds same in position. By reason of the tension exerted by spring *p* on shaft *e*; when the pawl is released from engagement with the teeth of the ratchet-wheel, the crank-handle will be automatically returned to its normal position; thereby automatically releasing said prongs from the sack. 25 40

In Fig. 1, the holder on the left hand side and indicated by an arrow, is shown in its normal position and ready to be placed in operative position gripping the sack—as heretofore fully described—and here indicated in the opposite holder located on the right. 45

Having now described my sack-holder for grain-chutes,—in connection with the illustrations;—as my invention and as new:—I claim— 50

A bag holder comprising a bracket, a shaft revolubly mounted in said bracket and having a forked lower end, a ratchet wheel rigidly mounted on said shaft, a coiled spring surrounding said shaft and adapted to be connected at its ends respectively to said shaft and to a fixed support, and a spring pressed pawl adapted to engage the said ratchet wheel. 55 60

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

CHARLES EDWARD PENROD.

Witnesses:

C. M. SCHWARTZ,
H. C. McDONALD.

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