

No. 645,544.

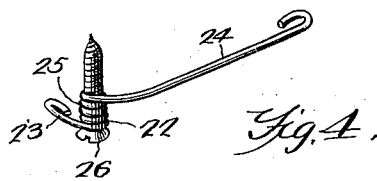
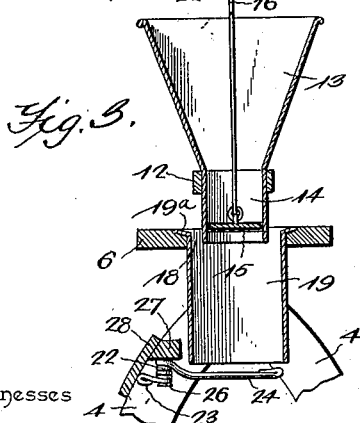
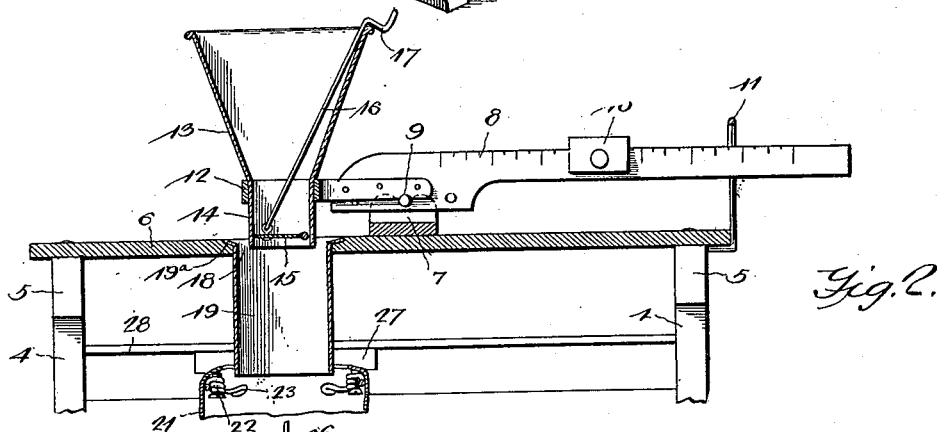
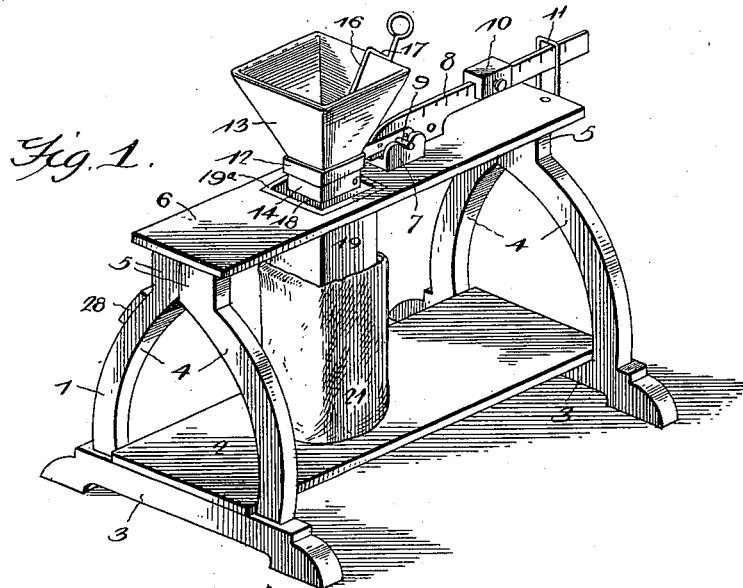
Patented Mar. 20, 1900.

J. C. BISSELL.

BAG HOLDER FOR GRAIN WEIGHING MACHINES.

(Application filed Apr. 22, 1898.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

JOSEPH C. BISSELL, OF STERLING, MINNESOTA.

## BAG-HOLDER FOR GRAIN-WEIGHING MACHINES.

SPECIFICATION forming part of Letters Patent No. 645,544, dated March 20, 1900.

Application filed April 22, 1898. Serial No. 678,538. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH C. BISSELL, a citizen of the United States, residing in Sterling, (Mapleton P. O.), in the county of Blue Earth and State of Minnesota, have invented new and useful Improvements in Bag-Holders for Grain-Weighing Machines, of which the following is a specification.

This invention relates to improvements in bag-holders for grain-weighing machines; and the object in view is to provide an improved construction in which individually-supported and yieldable members may readily be spread for the purpose of introducing a bag in operative relation to a filling-chute, said members adapted to be drawn inwardly toward each other and laterally with relation to the chute in order to frictionally clamp an edge of the bag against a binding-surface and to maintain the bag-mouth in an open or distended position for the ready passage of material thereinto.

With these ends in view the invention consists of the novel construction and arrangement of parts, as will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a perspective view of one type of a grain-weighing machine with which my improved bag-holder is especially adapted for use. Fig. 2 is a longitudinal sectional elevation through the weighing-machine and illustrating the improved bag-holder in operative relation to the filling-spout. Fig. 3 is a transverse section through a part of the weighing-machine and showing the method of supporting one member of the improved bag-holder in position for its short arm to frictionally bind against a supporting-beam. Fig. 4 is a detail perspective view of one member of the bag-holder and its pivotal pin or screw.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a supporting-frame provided with a platform 2, supported by transverse sills 3, which are provided at their terminals with depending portions forming feet. Each end of the frame is provided with a pair of slightly-curved inwardly-inclined standards 4, having vertical upper portions 5, which support a horizontal top board 6. The top 6

of the frame which connects the standards forms a support for the weighing mechanism and has mounted upon it a bracket or bearing 7, consisting of a block grooved to form two sides, which are provided at their upper edges with bearing-recesses.

The weighing mechanism consists of a scale-beam 8, which is fulcrumed at 9 in the bearing-recesses of the bracket or block 7 and which carries a sliding scale-weight 10. The front portion of the scale-beam is guided in the loop or keeper 11, and the rear portion of the scale-beam is provided with a substantially-rectangular yoke or frame 12, receiving a scale-pan 13, which is in the form of a hopper. The frame or yoke is preferably constructed of a single piece or strip of metal, bent between its ends to form the rectangular loop or opening and having its terminals arranged on opposite sides of and secured to the rear portion of the scale-beam.

The hopper, which is tapering, as shown, is rectangular in horizontal section and is provided with a depending rectangular spout 14, which fits within the opening of the yoke or frame. Within the rectangular spout of the hopper is arranged a hinged plate 15, forming a valve and operated by a rod 16, which is provided near its upper end with a rectangular bend 17, forming a shoulder and engaging the upper edge of the hopper, whereby the hinged plate or valve is held in a horizontal position to close the bottom of the hopper or scale-pan. The upper end of the rod is provided with a loop forming a handle, and the lower end of the rod has an eye which is linked into an eye of the hinged plate or valve.

The spout of the hopper or scale-pan is arranged over an opening 18 of the top 6 and is adapted to discharge the grain into a chute 19, which depends from the top of the supporting-frame, being provided at its upper edge with an outwardly-extending horizontal flange 19<sup>a</sup>. The flange is substantially horizontal and engages the top 6 at the edges of the opening 18, and the top 6 is slightly beveled at the opening 18 to bring the upper end of the chute substantially flush with the upper face of the said top.

The bag or sack 21 is supported beneath the chute by means of a pair of springs 22, composed of inner and outer arms 23 and 24 and

connecting-coils 25, which are arranged on fastening devices 26, depending from a cleat 27. The cleat 27 is secured to the inner face of a longitudinal bar 28, which is mounted on the standards at one side of the supporting-frame. The terminals of the outer arms are bent into hooks, as shown, and they are adapted to engage a sack or bag and hold the same with its mouth open beneath the chute. The fastening devices which support the springs are offset from the longitudinal bar, and in placing a bag on the bag-holder, it is first arranged on the fastening devices and the outer arms of the springs are then introduced into the mouth of the bag.

By reference to Fig. 2 of the drawings it will be seen that the pivotal pins or screws 26 are fastened to the cleat 27 of the supporting-bar 28 at points on opposite sides of the filling-chute 19 of the grain-weighing machine. These screws or pins serve to individually and pivotally connect the yieldable members of the bag-holder to the fixed cleat 27, and thus each member may be moved separately or independently of the other member for the purpose of facilitating the application of a bag to the frame and improved bag-holder of my invention. The individually-supported members of the bag-holder are mounted on the fixed cleat for movement laterally with respect to the filling spout or chute.

One important feature of my improvement resides in the attachment of the members to a cleat at points adjacent to the inner face of the supporting-bar 28 for the purpose of bringing the short arms 23 of said yieldable members into close relation to this supporting-bar. The members may be spread or moved to their open positions laterally away from the filling spout or chute in order to withdraw the short arms 23 from engagement with the supporting-bar 28, thus providing ample space between the bar and the short arms of the bag-holder members for the ready introduction of an edge of the bag into this space. After one edge of the bag shall have been adjusted between the supporting-bar and the short arm of the member the latter is turned on its pivotal connection with the cleat 27 and moved inward toward the spout or chute. This adjustment causes the short arm of the member to force the edge of the bag against the supporting-bar 28 in order to frictionally clamp

the edge of the bag against the beam by the short arm, and this adjustment furthermore places the long arm under tension, so that when it is engaged with the opposite edge of the bag the latter will be supported with its mouth in an open or distended position. From this description it is apparent that the members may be individually adjusted with ease and facility for the short arms thereof to frictionally bind against the bag and clamp the latter against the bar 28, while the long arms are placed under tension, so as to fit within the mouth of the bag and exert pressure against the latter, whereby the bag is held in a spread position by positively supporting the elastic members of the bag-holder.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. In a bag-holder for grain-weighing machines, the combination with a filling-spout, of a fixed supporting-bar adjacent to said spout, a pair of yieldable bag-holder members individually pivoted on the bar at points on opposite sides of the spout, each yieldable member having a long arm and a short arm connected by an intermediate coil, and fixed pivot-pins passing through the coils of said members and supporting the latter loosely for the short arms thereof to bind frictionally against the bar, substantially as described.

2. In a bag-holder for grain-weighing machines, the combination with a filling-spout, of a fixed supporting-bar adjacent to said spout and provided with a laterally-offset cleat, a pair of yieldable bag-holder members each having a short arm and a long arm connected by an intermediate coil, and pivot-pins fixed to the cleat on opposite sides of the spout and passing loosely through the eyes of said members to pivotally support the latter individually and in positions for the short arms thereof to bind against the supporting-bar, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOSEPH C. BISSELL.

Witnesses:

T. B. TAYLOR,  
A. A. BUCK.