No. 893,516. PATENTED JULY 14, 1908.

C. E. KEERAN.

SACK FILLING APPARATUS.

APPLICATION FILED JAN. 28, 1908.

Fig. 1

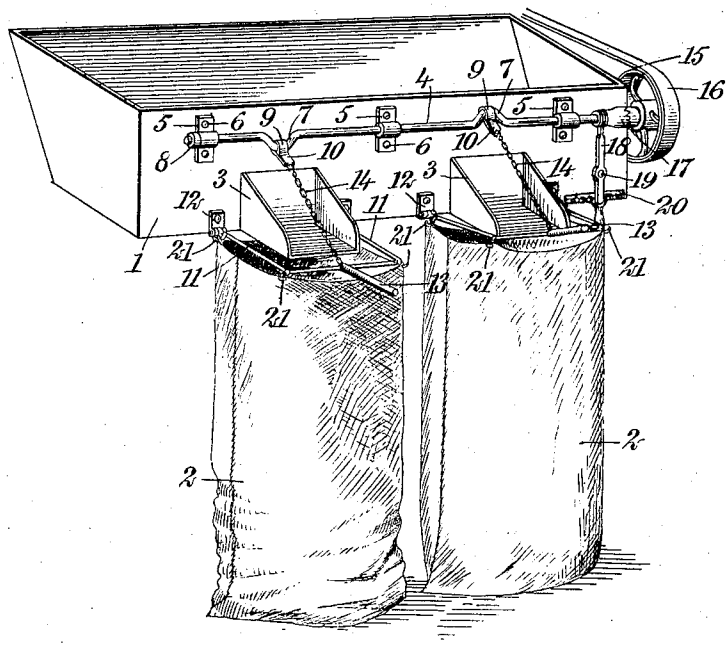
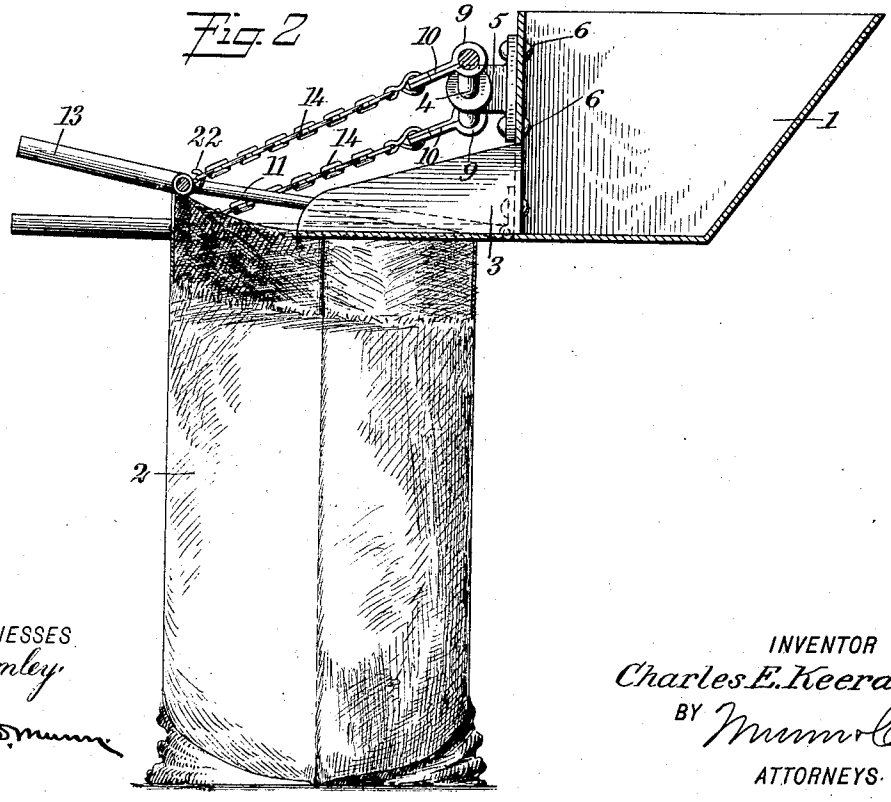


Fig. 2



WITNESSES

E. G. Bromley.

INVENTOR

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UNITED STATES PATENT OFFICE.

CHARLES E. KEERAN, OF HARRINGTON, WASHINGTON.

SACK-FILLING APPARATUS.

No. 893,516. Specification of Letters Patent. Patented July 14, 1908.

Application filed January 23, 1908. Serial No. 412,975.

To all whom it may concern:

Be it known that I, CHARLES E. KEERAN, a citizen of the United States, and a resident of Harrington, in the county of Lincoln and State of Washington, have invented a new and Improved Sack-Filling Apparatus, of which the following is a full, clear, and exact description.

This invention relates to filling apparatus, and more especially to such as are used in filling sacks, bags and the like with granular or loose material.

An object of the invention is to provide a device of the class described, simple and durable in construction and inexpensive to manufacture, and which can be used with sacks, bags or other receptacles.

A further object of the invention is to provide a sack filler having means for continually keeping the sacks in motion, thereby causing the grain or other material which is being run into the sacks to be more closely packed.

A still further object of the invention is to provide means for movably holding a sack or other receptacle at a filling chute, and means for adjusting the receptacle to insure the better packing of the material.

Reference is to be had to the accompanying drawings forming a part of this invention, in which drawings like characters of reference indicate like parts in both the views, and in which

Figure 1 is a perspective view of the invention, showing sacks supported at the chutes; and Fig. 2 is an enlarged cross section of the device.

Referring more particularly to the drawings, 1 represents a hopper or any other suitable container, from which grain or other loose material may be run into sacks 2. Chutes 3 extend partially over the sacks and direct the material into the latter. A crank shaft 4 is journaled on the hopper by means of journal brackets 5, the latter being secured in place by rivets or bolts 6. In the accompanying drawings the shaft 4 has two cranks 7. It should, however, be understood that any desired number of cranks may be used depending on the number of chutes. A nut or other suitable locking member may be used at the end of the crank shaft to secure it in position. Movably secured at the cranks 7 are rings 9 having arms 10 integral therewith, and for the purpose to be hereinafter described. The rings and arms are preferably fashioned from strip metal suitably bent into shape. Arranged adjacent to each of the chutes of the hopper is a frame 11 formed from an elongated member, and movably secured in position by hinges 12 of common or preferred form. Hooks 21 or other suitable catches on the frame 11 are used in movably supporting the sacks at the frame.

As shown in the drawings, the frame is preferably rectangular in form. However, I do not limit myself to this shape as others equally advantageous may be used without departing from the spirit of the invention.

A grip 13 is secured to the frame for manually lifting the same and the sacks attached thereto. A connecting member 14 of chain, wire or other flexible material, joins the arm 10 at the ring 9 to the frame 11 at a point adjacent to the grip 13. For this purpose each of the frames has a hook 22. For operating the crank shaft, a driving pulley 15, which is itself driven by a belt 16 or other suitable means, is used. A ratchet clutch 17 on the crank shaft connects the latter with the driving pulley 15. A clutch lever 18 pivoted upon a suitable pin 19 serves to throw the clutch into or out of engagement with the driving pulley. A notched bar 20 locks the clutch lever in a plurality of positions.

In operating the device, the clutch is thrown into engagement with the driving pulley and the crank shaft is thereby put in motion. As the shaft rotates it reciprocates the frames by means of the cranks and connecting parts, and thereby agitates the receptacles.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a device of the class described, the combination of a hopper with a crank shaft, driving means for said shaft, means for rendering said driving means operative or inoperative with respect to said crank shaft, sack supporting frames, means on said frames for securing the sacks in position, handles on said frames for manually lifting the same, and flexible means connecting said frames and said crank shafts whereby said frames will be agitated by said crank shafts.

2. In a device of the class described, the combination of a hopper with a driving pulley, a crank shaft, a clutch for throwing said crank shaft either into or out of operative engagement with said driving pulley, sack supporting frames, hooks on said frames for

securing the sacks in position, handles on said frames for manually lifting the same, and flexible means connecting said frames and said crank shaft, whereby said frames may be agitated by said crank shaft.

3. In a device of the class described, the combination of a hopper having journal brackets, a crank shaft carried by said brackets, a driving pulley, a ratchet clutch for throwing said crank shaft either into or out of operative engagement with said driving pulley, a clutch lever for operating said clutch, means for securing said clutch lever in a plurality of positions, movable rings arranged at the cranks of said crank shaft, said rings having arms integral therewith, sack-supporting frames hinged to said hopper, hooks on said frames, flexible means for attaching the arms of said rings to said frames, and grips for manually actuating said frames.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES E. KEERAN.

Witnesses:
D. L. WOLFE,
A. G. MITCHUM.