No. 882,031. PATENTED MAR. 17, 1908.

G. UHLMANN.

DELIVERY APPARATUS.

APPLICATION FILED AUG. 13, 1906.

Fig. 1.

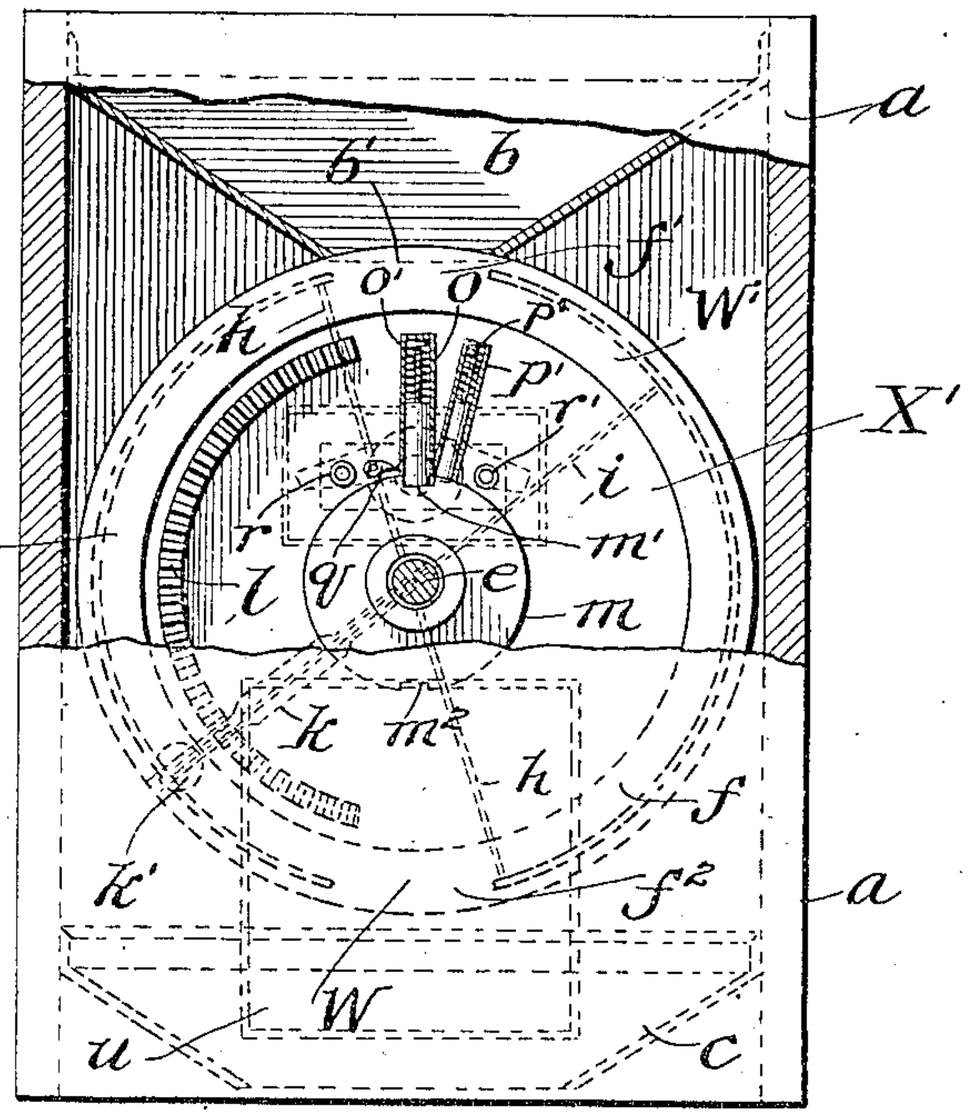
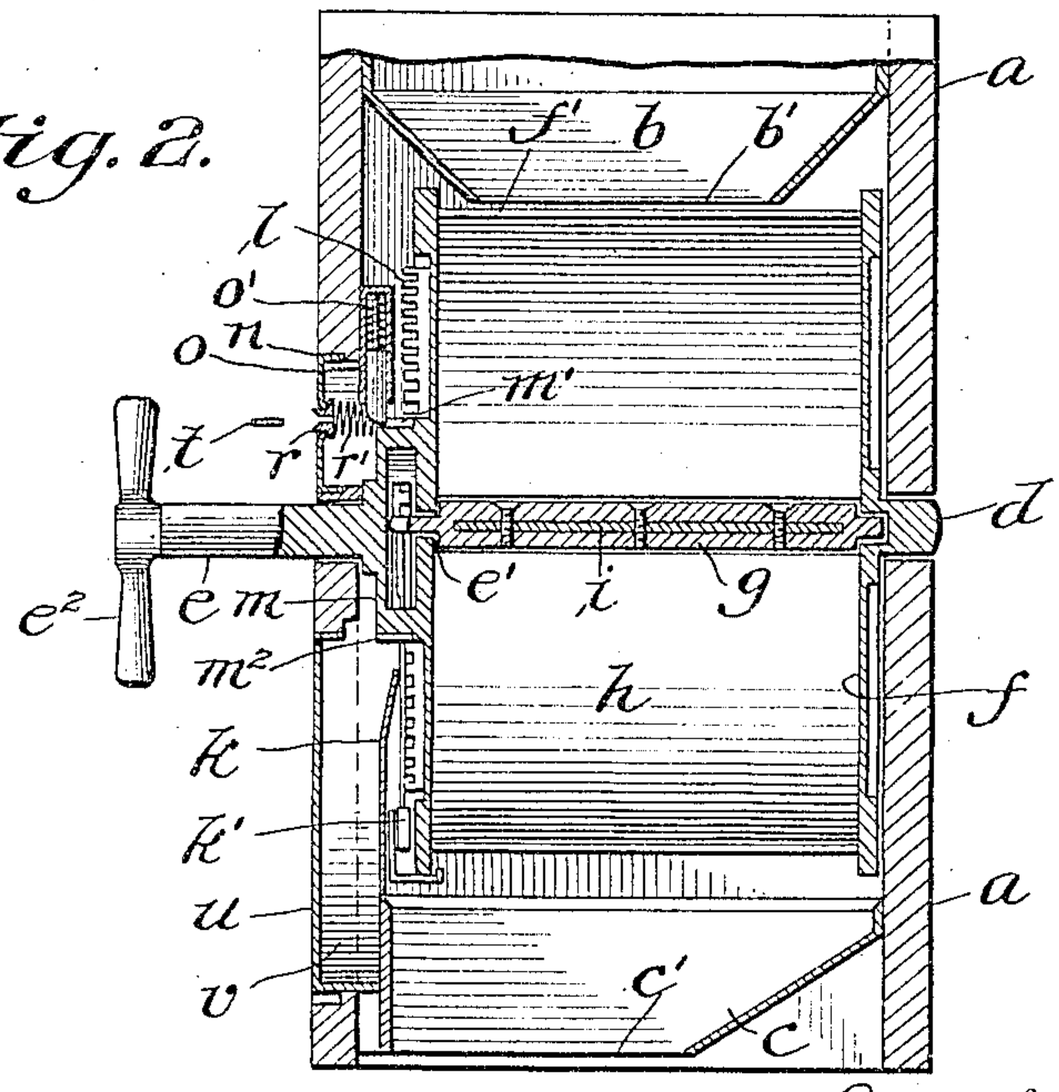


Fig. 2.



Witnesses

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DELIVERY APPARATUS.

No. 882,031. Specification of Letters Patent. Patented March 17, 1908.

Application filed August 13, 1906. Serial No. 330,347.

To all whom it may concern:

Be it known that I, GEORG UHLMANN, a subject of the German Emperor, and residing at Dresden, Germany, have invented certain new and useful Improvements in Delivery Apparatus, of which the following is a specification.

The subject of the present invention is an apparatus for delivering measured quantities of granular substances of various kinds.

The new apparatus may be used for numerous purposes. It enables stable-keepers, horse-owners, and the like, for instance, to keep a check on the amount of feed given out. In hospitals, barracks, and other large institutions it serves for storing desiccated vegetables and the like, and for distributing the same in rations under control. Storekeepers, also, may employ it for dispensing and measuring purposes.

The essential features of the new apparatus are the simplicity of its construction and the reliability of its action.

One form of construction of the invention is illustrated in the accompanying drawing, in which

Figure 1 is a vertical section of an oat distributor, Fig. 2 represents a vertical section taken at right angles to Fig. 1.

The apparatus consists of a box *a*, closed by a suitable cover, or reaching up to the floor of a higher story, from which the material can be fed into the apparatus. Inside the box *a* are two hoppers *b c*, b^1 c^1 being the mouths thereof. Between the hoppers a drum *f*, having two diametrically opposed peripheral apertures f^1 f^2, is mounted by means of trunnions *d e*, which have their bearing in the wall of the box. Inside the drum there is mounted a shaft *g*, the one end of which lies in a recess in the trunnion *d*, while the other end passes through the hole e^1 in the drum head and is received by the boss or pocket *m*, the trunnion *e* which is secured thereto being provided with a handle e^2 outside the box. The interior of the drum is divided into two compartments by a longitudinal partition *h*, which leaves space for the shaft *g*. A second partition *i* is carried by the shaft itself and rotates with it. For the purpose of rotating the shaft *g*, a lever hand *k* is secured to one end and furnished with a knob k^1. This hand is resilient and engages between the teeth or projections of a rack *l* secured to the head of the drum. The periphery of the pocket *m* is notched at m^1, m^2.

Into the wall of the box *a* there is fitted a casing *n*, containing two bolts *o*, *p*, rounded at the one end and forced against the periphery of the pocket *m* by springs o^1, p^1. Adjacent to the bolt *o* a pawl *q* is pivoted.

r is a button supported by springs r^1. This button has a slot *s* to receive the checks *t*, and the passage for the latter extends up to the notches *m*, m^1.

v is a check receptacle and *u* a door closing the same.

To use the apparatus the door *u* must be opened and the lever *k* turned so as, by means of the partition *i*, to form two compartments W W^1 of such definite size as may be desired, whereupon the door is closed again. The apertures f^1, f^2 in the drum are calculated for the smallest size of compartment practically occurring. Access can be had to the spaces X, X^1 for the removal of any stray grains by approaching the partition *i* to the partition *h*, until the two lie closely together. The oats or the like are fed from the supply above, through the hopper *b*, b^1 into the compartment (say W) below it, which is therefore, always filled. If now a coin or check *t* is placed in the slot *s* and the button *r* simultaneously be pushed inward, the coin will be pushed against the rounded bottom end of the bolt *o* and will lift it out of the notch m^1, and occupy the latter itself; whereupon the button *r* will snap back under the action of the springs r^1. The drum is thus no longer locked, so that the handle g^2 can be turned and the drum rotated. The compartment W now comes below and shoots its contents into the hopper *c*, whence the oats fall into the receptacle held below to receive them. Meanwhile the other compartment W^1 will have arrived before the mouth b^1 of the hopper *b* and the bolt *o* will snap into the notch m^2. The check during the interval has dropped into the receptacle *v*.

The pawl *q* and bolt *p* serve to prevent illicit use of the apparatus. For if the bolt *o* were elevated for instance by a slip of wood, a wire, or the like, and the drum then rotated, the pawl *q* or the bolt *p* (depending upon the direction of rotation) would drop into the empty notch and check further rotation. In either case the casing *n*, which is kept locked, has then to be opened to

re-adjust the mechanism, so that the fraudulent manipulation comes to light.

The owner of the apparatus gives out a certain number of checks, and then knows that only the set number of rations, of the determined quantity, can be distributed. When several apparatus are employed, checks of different sizes (and slots to correspond) may be used, so that each machine can be operated only by a check of definite size.

The apparatus may be adapted for purposes of public sale, being then arranged for a certain denomination of coin. If desired, the apparatus in such case may be fitted with some other kind of coin actuated release mechianism.

What I claim as new and desire to secure by Letters Patent is:—

1. A delivery apparatus comprising a casing having an inlet and an outlet, a peripherally perforated rotary drum between the inlet and outlet of the casing divided into compartments by a fixed wall, a movable wall adjustable to different positions in said compartments, means for adjusting and locking said movable wall, and means for rotating and locking the drum, substantially as described.

2. A delivery apparatus comprising a casing having an inlet and an outlet, a peripherally perforated rotary drum between the inlet and outlet of the casing divided into compartments by a diametric wall, a rotary diametric wall for dividing each said compartment into two compartments, means for rotatably adjusting said rotary wall comprising a resilient hand lever, a rack coöperating with said hand lever to lock said hand lever, means for rotating the drum, and means for locking the drum against rotation, substantially as described.

3. A delivery apparatus, comprising a casing having an inlet and an outlet, a horizontal, peripherally perforated, rotary drum mounted therein between the inlet and the outlet, and divided into two compartments by a fixed wall, a shaft mounted within the drum and provided with partitions subdividing the said drum compartments, a pointer-handle at the end of said shaft, a rack on the drum head in which said handle engages, means for automatically locking the said drum against rotation, and means for releasing the locking mechanism, substantially as described.

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

GEORG UHLMANN.

Witnesses:
PAUL E. SHILLING,
PAUL ARRAS.