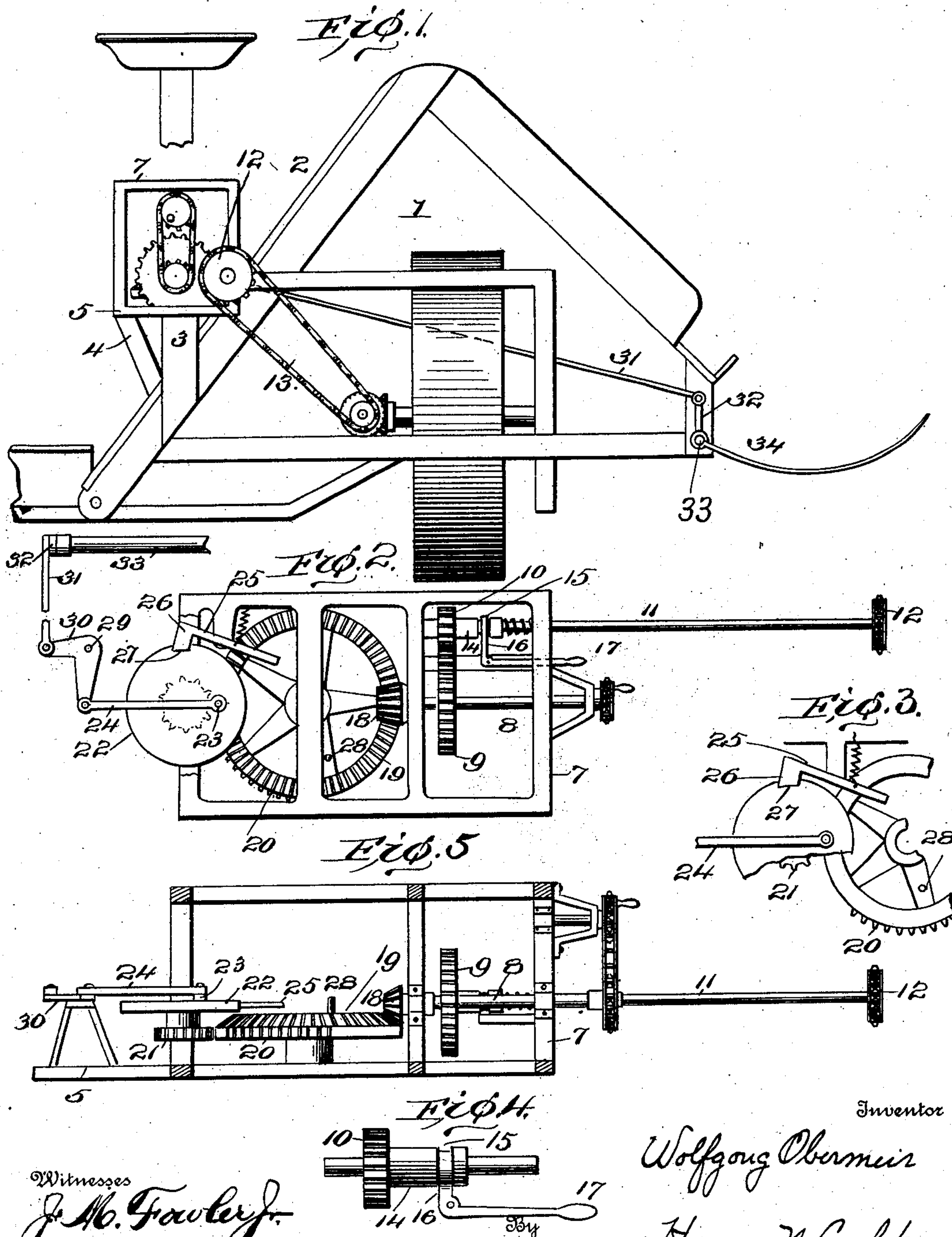


No. 753,907.

PATENTED MAR. 8, 1904.

W. OBERMEIR.  
AUTOMATIC DROPPER.  
APPLICATION FILED JUNE 3, 1903.

NO MODEL.



Witnesses  
J. M. Fowler  
Edmundson

Inventor  
Wolfgang Obermeir  
Henry N. Cope  
Attorney



# UNITED STATES PATENT OFFICE.

WOLFGONG OBERMEIR, OF LOSTLAKE, WISCONSIN.

## AUTOMATIC DROPPER.

SPECIFICATION forming part of Letters Patent No. 753,907, dated March 8, 1904.

Application filed June 3, 1903. Serial No. 159,852. (No model.)

*To all whom it may concern:*

Be it known that I, WOLFGONG OBERMEIR, a citizen of the United States, residing at Lostlake, county of Dodge, and State of Wisconsin, have invented certain new and useful Improvements in Automatic Droppers for Self-Binder Harvesting-Machines, of which the following is a specification.

My invention relates to automatic droppers for self-binder harvesting-machines; and the object thereof is to provide automatic means for dropping a number of sheaves at a predetermined time, so that the man who is shocking will not have to carry a number of bundles, as is ordinarily done when there is no means for carrying the bundles, and dropping them in numbers at predetermined times.

A further object is the provision of means whereby the dropping means is locked for a certain length of time and means whereby said locking means is released.

With these objects in view the invention consists in the novel features and combination of parts, which will be fully described hereinafter, and more particularly pointed out in the claims appended.

In the accompanying drawings, forming part of the specification, Figure 1 is an elevation of a self-binder with attachment thereon. Fig. 2 is an enlarged view of the mechanism removed from the binder. Fig. 3 is a detail view, parts broken away, of the locking mechanism. Fig. 4 is a detail of the clutch mechanism, and Fig. 5 is a longitudinal section taken on line *xx* of Fig. 2.

Similar reference-numerals refer to corresponding parts in both specification and drawings.

Secured to the binder 1 at the sides of the straw-carrier 2 are two brackets 3 and 4, adapted to support a platform 5, on which the mechanism is mounted and to which is also secured the operator's seat 6. Suitably attached to this platform 5 is a framework 7, which is adapted to support the mechanism and which covers the gearing, so as to prevent straw and dust from clogging the works. Centrally journaled in the framework 7 is a shaft 8, carrying the pinion 9, which receives motion from the pinion 10, secured to a counter-shaft

11, which is also journaled in the framework 7. Mounted on this counter-shaft 11 is a sprocket-wheel 12, carrying the chain 13, which receives motion from the gearing which drives the machine. The pinion 10 is keyed to slide on the shaft 11 and is provided with an elongated collar 14, having the circumferential groove 15, adapted to receive one end of a bell-crank lever 16, which is under control of the operator by means of the handle 17. Keyed to the shaft 8 is a gear-wheel 18, which meshes with the bevel-gear 19, of much larger diameter. This wheel is provided with a number of teeth 20 on its side, the number corresponding with the number of teeth on a pinion 21, with which they mesh once every revolution. Secured to the pinion 21 and positioned above the wheel 19 is an annular disk 22, which is provided with the wrist-pin 23, on which is journaled one end of the pitman 24. Pivoted to the framework 7 in juxtaposition to the disk 22 is a locking-lever 25, having the engaging lug 26, which is normally held in engagement with a notch 27 in the disk 22. At each revolution of the wheel 19 a pin 28 on said wheel engages the free end of the locking-lever and disengages it from the disk. At the same time the teeth 20 engage the pinion 21, forcing the pinion to revolve and to carry with it the disk 22, and thus reciprocate the pitman 24.

Journaled on a stud-pin 29, which is suitably secured to the platform 5, near the bracket 3, is a bell-crank lever 30, one end of which is attached to the pitman 24. The opposite end of said bell-crank lever is attached to a rod 31, which extends back along the side of the grain-carrier and is attached to an arm 32 on the shaft 33 of the sheaf-rack 34.

The operation of the device is as follows: The grain after passing the binder-deck is received by the sheaf-rack 34 and held until a predetermined time, when the sheaves are dumped automatically. As the shaft 11 is rotated the teeth of the pinion 10, secured thereto, mesh with the larger pinion 9, mounted on shaft 8, and give motion to the wheel 19 through the pinion 18. As the wheel 19 rotates the pin 28 thereon engages the locking-lever 25 and disengages it from the disk 22.



At the same time the teeth 20 on the wheel 19 engage the pinion 21, which rotates the disk 22 and reciprocates the pitman 24 and the bell-crank lever, thus raising and lowering the sheaf-rack 34 and dumping the grain at each revolution.

Just above and geared to the shaft 8 is a pinion provided with a hand-wheel, which is adapted to operate the device when it is desired to dump the sheaves earlier or later than the dump which would ordinarily occur. In order to do this, the pinion 10 is thrown out of engagement with the pinion 9.

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

1. In a harvesting-machine, the combination with a sheaf-rack, means for raising and lowering said rack, and a reciprocating device for operating said raising and lowering means, of means for operating said reciprocating device, means for automatically locking said operating means, comprising in part a catch, means normally tending to throw said catch into locking position, and a pin on a part of said operating means which trips said catch and permits said raising and lowering means to operate.

2. In a harvesting-machine, the combination with a sheaf-rack, and means for raising and lowering said rack, of a reciprocating device for operating said raising and lowering means, means for operating said reciprocating

device, comprising in part a segment-wheel, a pivoted catch adapted to lock a part of said operating means, and a pin on said segment-wheel adapted to release said locking-catch.

3. In a harvesting-machine, the combination with a sheaf-rack, means for raising and lowering said rack, and a reciprocating device for operating said raising and lowering means, of a notched wheel for operating said reciprocating device, means for rotating said notched wheel comprising in part a segment-wheel, means normally tending to lock said notched wheel, and a pin on said segment-wheel adapted to disengage said locking means just prior to the rotation of said notched wheel by the segment-wheel.

4. In a harvesting-machine, the combination with a sheaf-rack, means for raising and lowering said rack comprising in part a notched wheel, means normally tending to engage said notched wheel and lock the same, means for rotating said notched wheel, and means on said rotating means which trips said locking means and permits the rotating means to operate to raise and lower the said rack.

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

WOLFGONG OBERMEIR.

Witnesses:

G. STOLZ,

A. N. MIRLACH.