No. 776,611. PATENTED DEC. 6, 1904.

J. W. McCOY.

PORTABLE GRAIN CONVEYER.

APPLICATION FILED MAY 9, 1904.

NO MODEL.

Fig. 3.

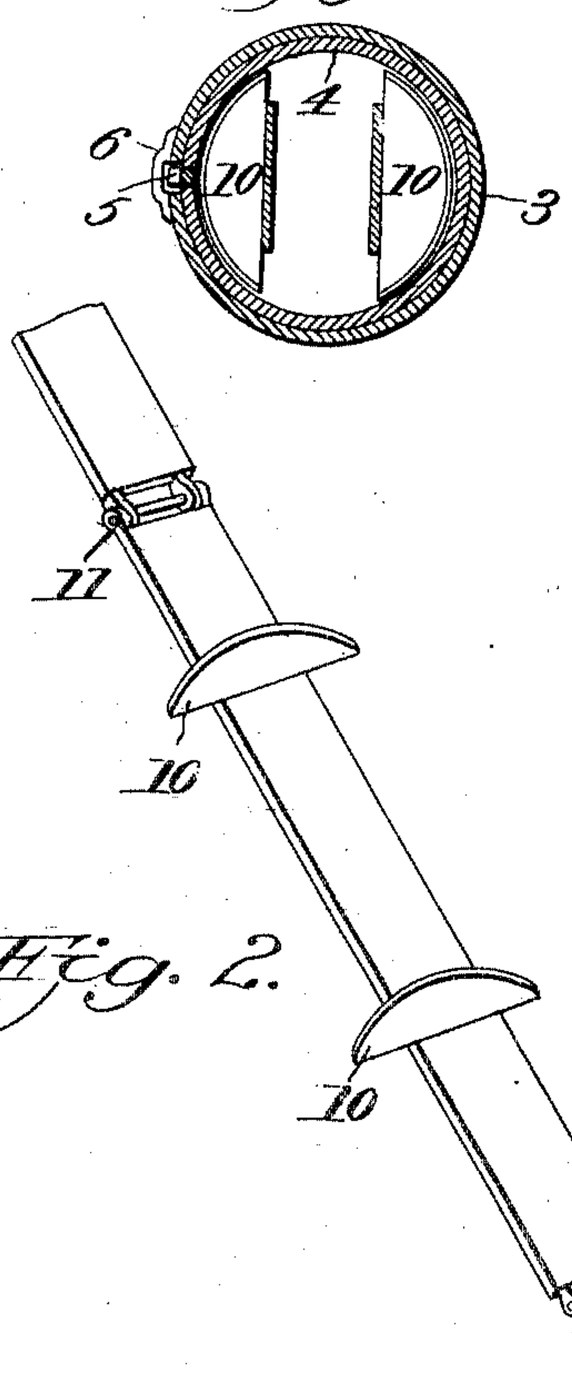
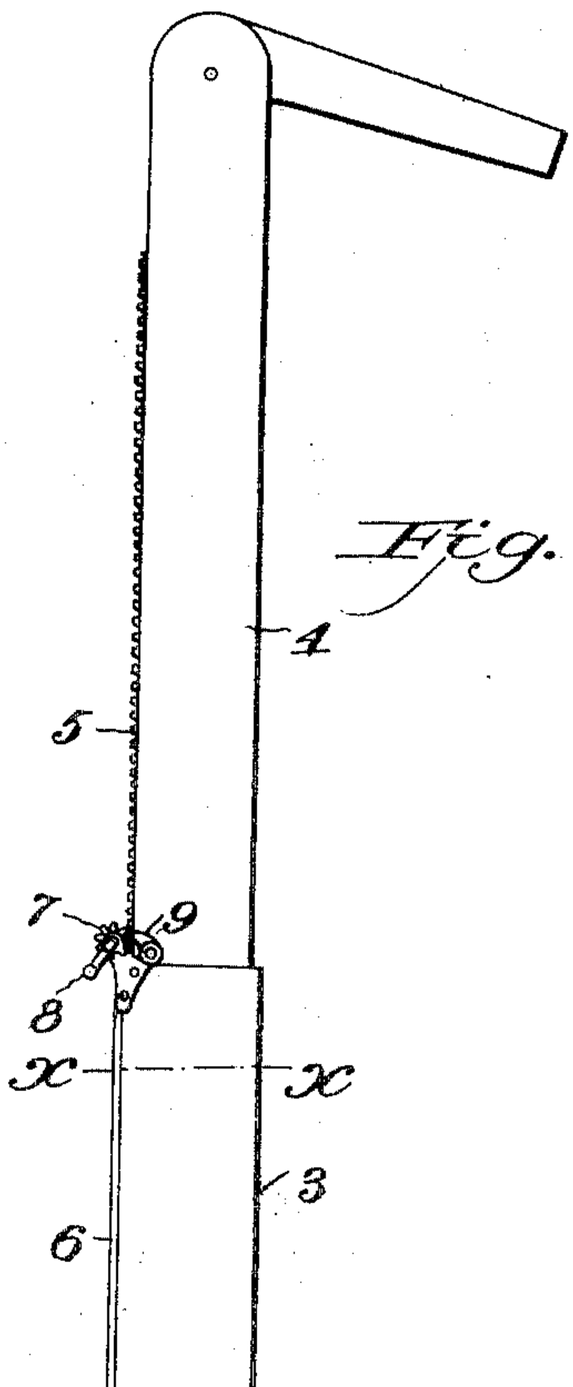


Fig. 2.

Fig. 1.



WITNESSES:

C. H. Walker.

F. E. Rapp.

INVENTOR

John W. McCoy

BY E. D. Hobson

his Attorney

No. 776,611. Patented December 6, 1904.

UNITED STATES PATENT OFFICE.

JOHN W. McCOY, OF STAFFORD, KANSAS.

PORTABLE GRAIN-CONVEYER.

SPECIFICATION forming part of Letters Patent No. 776,611, dated December 6, 1904.

Application filed May 9, 1904. Serial No. 207,001. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. McCOY, a citizen of the United States, residing at Stafford, in the county of Stafford and State of Kansas, have invented new and useful Improvements in Portable Grain-Conveyers, of which the following is a specification.

My invention relates to grain-conveyers, and particularly to that class known as "portable" grain-conveyers.

The object of my invention is to produce a grain-conveyer that may be easily transported from one place to another.

Furthermore, the object of my invention is to provide a grain-conveyer that will permit of adjustment in order to enter through low doorways and also to allow the device to be operated in cars, bins, or other receptacles.

Finally, the object of the invention is to produce an adjustable portable grain-conveyer which may be operated by manual power and adapted to transfer grain from a wagon, cart, or other vehicle to a car, granaries, or bins, or vice versa, as may be desired, or my invention may be used to bag grain when unloading from car, wagon, or other transporting vehicle.

With the above and other objects in view the invention consists in the improved construction, arrangement, and combinations of parts, to be hereinafter more fully set forth, and particularly pointed out in the claims.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, and in which corresponding parts in the several views are indicated by similar reference characters, and in which—

Figure 1 is a perspective view in elevation of my portable adjustable grain-conveyer. Fig. 2 is a view showing a section of the endless bucket-carrying belt. Fig. 3 is a cross-section of the lower section of the tower on the line X X.

In the drawings, 1 denotes a receiving-receptacle having an incline bottom 2, into which the grain is dumped from a wagon or cart, or the receptacle may be placed in such position alongside of grain-car that on opening the car-door the grain will fall into the receptacle and then be conveyed into a wagon or into sacks. The tower, which is suitably attached to the receptacle, comprises two sections—a lower section 3 and an upper section 4, which fits inside of the lower section. A rack 5 is secured on the upper section and slides in a slot 6, formed in the lower section. On the top edge of the lower section is secured a small cog-wheel 7, the cogs of which mesh with the teeth on the rack. A handle 8 is provided to operate the cog-wheel, and a pawl 9, secured to the edge of the tower, seats in the cogs, and thus prevents the upper section of the tower from accidental displacement. In the top of the upper section and also in the bottom of the lower section are mounted pulleys over which an endless belt composed of sections, as shown in Fig. 2, travels. The endless belt carries buckets 10 10, which may be of any suitable construction. In order that the sections of the belt may be connected and disconnected, I provide on each end of the sections hinges 11 11, which are connected by a removable pin or bolt.

Secured to the receptacle is a frame 13, which supports a train of gear-wheels 14, one of said gear-wheels being provided with a sprocket-wheel over which the endless chain 15 travels and by which motion is given to the endless bucket-carrying belt through the sprocket-wheel 16, secured on the axle of the lower pulley.

In order that the conveyer may be easily moved from one place to another, I secure casters 17, 18, and 19 to the receptacle.

It will be observed from the foregoing description that to operate my invention the wheat or grain is placed in the receptacle, from which it runs into the lower portion of the lower section of the tower and is carried to any height desired within the limits of the entire height of the tower. In order that the tower may be adjusted to any desired height, and which could not be accomplished without provision being made to lengthen or shorten the endless bucket-carrying belt, this is provided for through the sections of the belt, as when the tower is only partially raised sections of the belt are removed by drawing the

belt out through the opening in the top of the upper section of the tower and removing as many sections as desired and then connecting the free ends of the sections remaining in the tower in order to bring the belt to the required length.

The construction, operation, and advantages, it is thought, will be understood from the foregoing description, it being noted that various changes may be made in the proportions and details of construction without departing from the scope of the invention.

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

1. In a portable grain-conveyer, a receptacle having an inclined bottom and provided with suitable casters, a tower comprising an upper and a lower section, the upper section sliding inside of the lower section, a rack carried by the upper section, a cog-wheel secured to the upper edge of the lower section having teeth meshing with the teeth on the rack, means for preventing the accidental rotation of the cog-wheel, pulleys secured in the top of the upper section and in the bottom of the lower section of the tower, an endless bucket-carrying belt comprising sections adapted to travel over the pulleys, means for connecting the belt-sections and means for imparting motion to the endless belt through the medium of a train of gear-wheels, sprocket-chain and sprocket-wheel substantially as described.

2. In a portable grain-conveyer, a receptacle having an inclined bottom and provided with casters, a tower comprising an upper and a lower section secured to the receptacle, a rack carried by the upper section and a cog-wheel secured on the upper edge of the lower section and meshing with the rack, means for preventing the accidental turning of the cog-wheel, pulleys secured in the tower-sections, an endless sectional bucket-carrying belt adapted to travel over the pulleys, a train of gear-wheels supported by a frame secured to the receptacle, a sprocket-wheel secured on the end of the axle of the pulley secured in the lower section of the tower, a sprocket-chain connection between the sprocket-wheel and the train of gear-wheels substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN W. McCOY.

Witnesses:
NORRIS R. FAIR,
THOMAS O. RAMSEY.