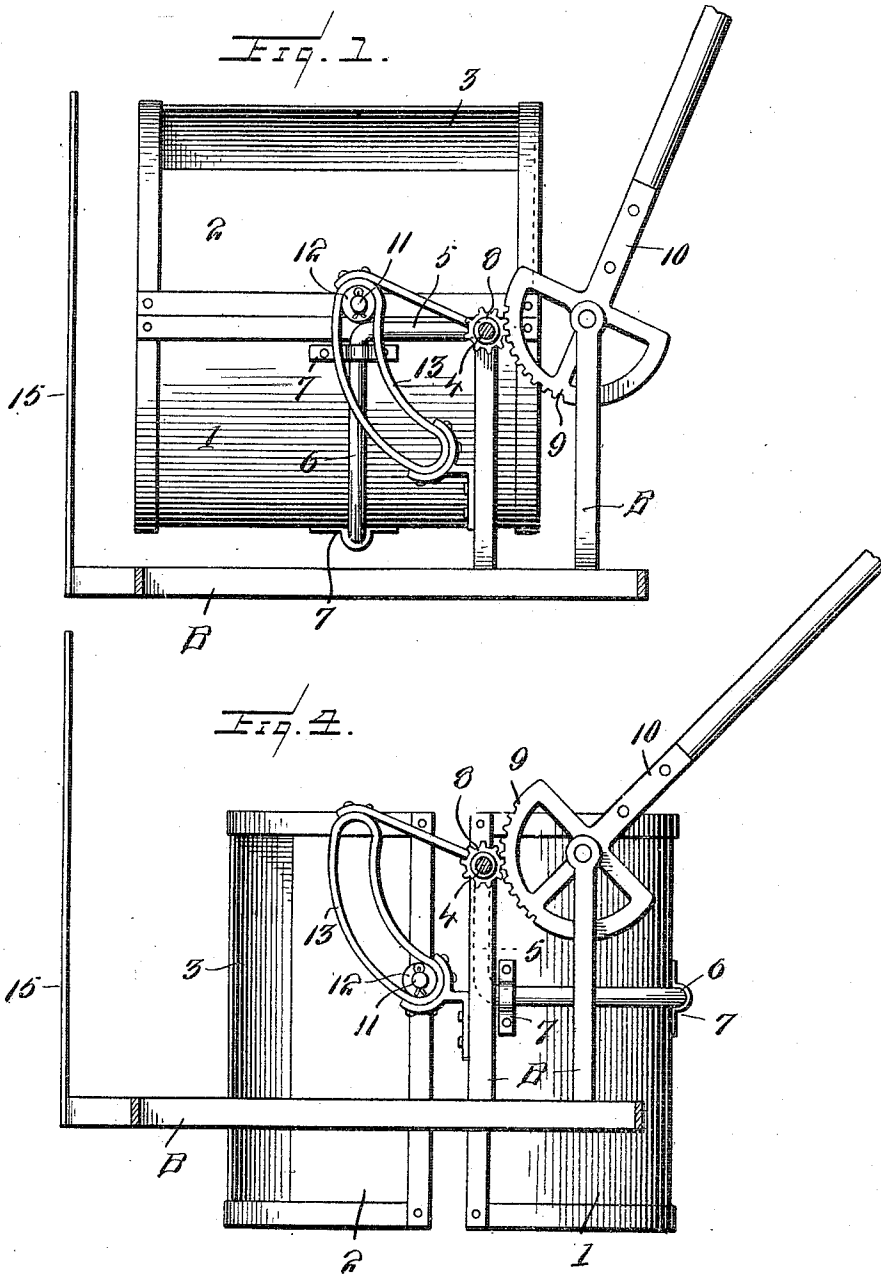


994,799.

G. H. TRACY.
GRAIN SHOCKING DEVICE.
APPLICATION FILED MAR. 2, 1910.

Patented June 13, 1911.

3 SHEETS—SHEET 1.



Witnesses
E. R. Ruppert
Wm. Baggett

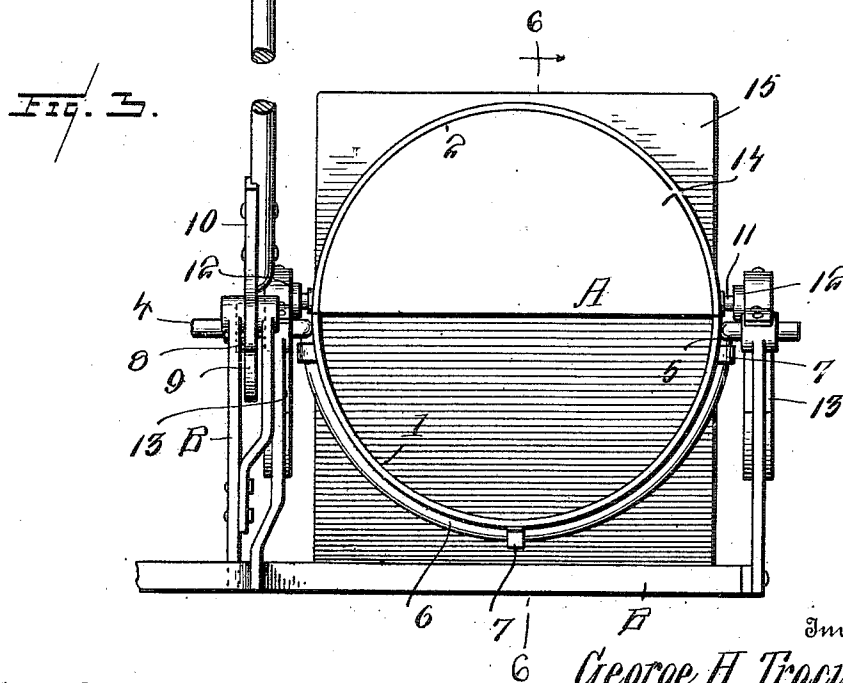
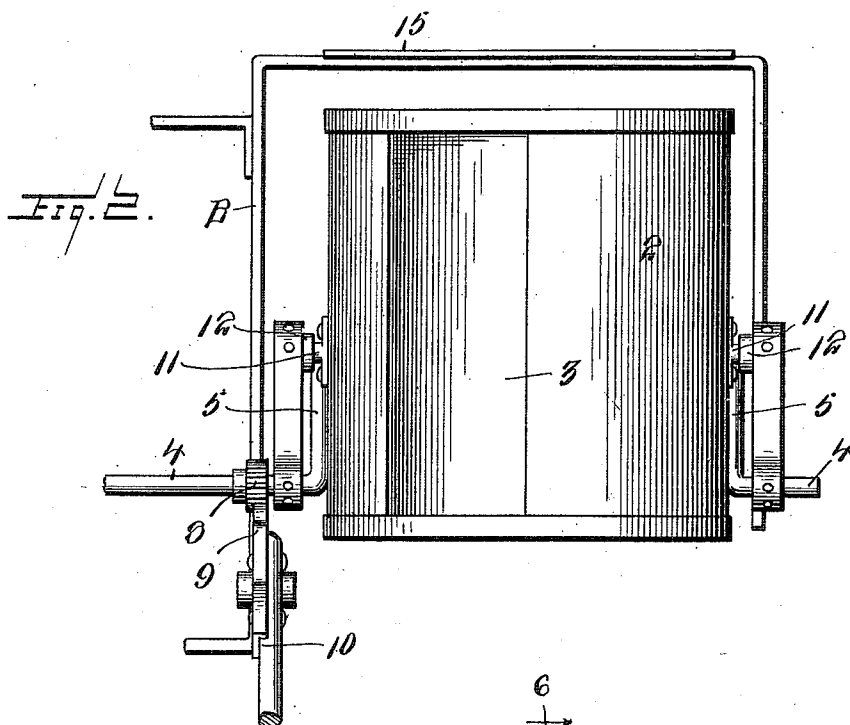
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3 SHEETS—SHEET 2.



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3 SHEETS-SHEET 3.

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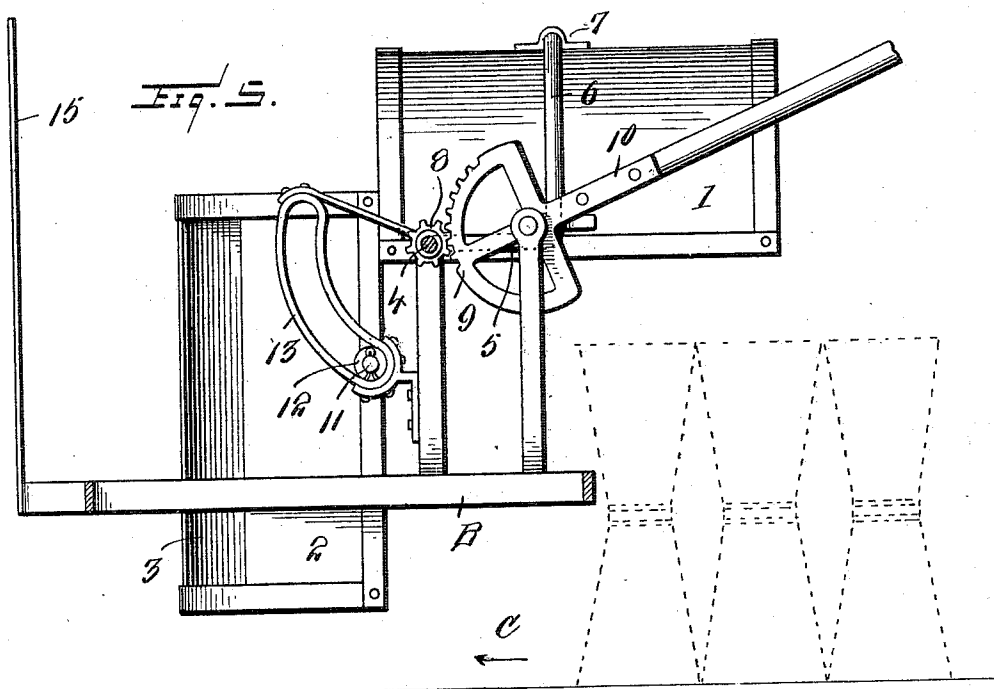
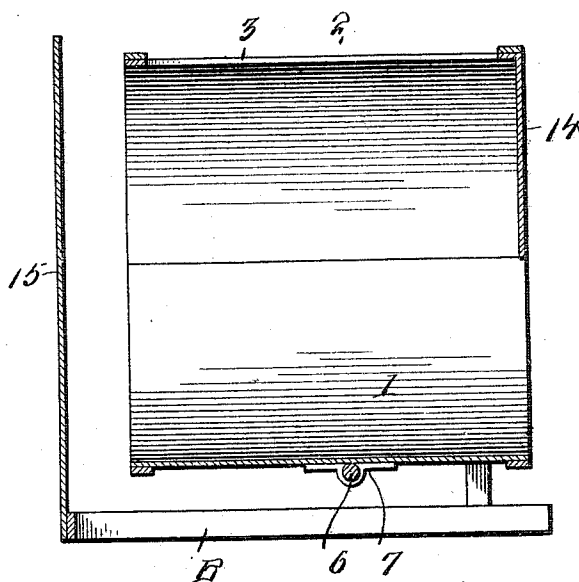


Fig. 6.



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UNITED STATES PATENT OFFICE.

GEORGE H. TRACY, OF ALBION, NEBRASKA.

GRAIN-SHOCKING DEVICE.

994,799.

Specification of Letters Patent. Patented June 13, 1911.

Application filed March 2, 1910. Serial No. 546,832.

To all whom it may concern:

Be it known that I, GEORGE H. TRACY, a citizen of the United States of America, residing at Albion, in the county of Boone and State of Nebraska, have invented new and useful Improvements in Grain-Shocking Devices, of which the following is a specification.

This invention relates to grain shockers for harvesters and reaping machines, and it has for its objects to produce a device of this class which shall possess superior advantages in point of simplicity, durability and general efficiency.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawings,—Figure 1 is a side elevation of the improved shocking device showing the same in its initial or bundle-receiving position. Fig. 2 is a top plan view of the device in the position shown in Fig. 1. Fig. 3 is a rear elevation of the device in the position shown in Figs. 1 and 2. Fig. 4 is a side elevation, showing the device in tilted or shock-setting position. Fig. 5 is a side elevation, showing the device in shock-discharging position. Fig. 6 is a sectional view taken on the line 6—6 in Fig. 3.

Corresponding parts in the several figures are denoted by like characters of reference.

The improved grain shocking device consists essentially of a casing or receptacle A of approximately cylindrical shape, the same being longitudinally divided into two semi-cylindrical parts or members which, for convenience, will be referred to, respectively, as the receiving member or cradle 1 and the top member or cover 2. The members 1 and 2 may be constructed of sheet metal, suitably braced and reinforced, and the cover member 2 is provided with an opening 3 sufficiently large to admit the sheaves or bundles as they are delivered from the binder deck

of the machine in connection with which the improved shocking device is used. Inasmuch as the shocking device may be arranged and supported in various ways according to the structure of the special machine in connection with which it is used, in the drawings hereto annexed conventional supporting means consisting of a frame structure B have been shown, said frame including uprights affording bearings for a rock shaft 4 which is arranged transversely of the cylindrical casing. Said rock shaft is provided with a crank member, including arms 5 that extend radially from the rock shaft, said arms being connected by an arcuate approximately semi-circular loop 6 upon which the cradle member 1 of the cylindrical casing is supported and with which it is securely connected by means of clips or keepers 7. The rock shaft carries a pinion 8 meshing with a segment rack 9 carried by a hand lever 10 which is fulcrumed upon the supporting frame.

The cover member 2 of the casing A is normally supported upon the upper edge of the cradle member, and said cover member is provided with laterally extending pins or trunnions 11 preferably equipped with anti-friction rollers 12, the same being guided in arcuate slotted guides or frames 13 which are suitably supported upon the frame adjacent to the sides of the casing, said guides being approximately concentric with the rock shaft 4, and said guides extending downwardly adjacent to the sides of the cradle member of the casing. The guides 13 serve to retain the cover member in the desired relation to the bottom member of the casing.

The front and rear ends of the cradle member 1 of the casing are unobstructed, but the rear end of the cover member 2 with reference to the direction of movement of the machine in connection with which the device is used is preferably obstructed by a hood or closure 14. In order to retain the bundles of grain safely within the casing until discharged, I provide, however, a shield or apron 15 which is suitably supported upon the frame a short distance in front of the casing A.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of this invention will be readily apparent to those skilled in the art to which it appertains.

When the desired number of bundles have been deposited in the casing through the opening 3 in the cover member thereof, the rock shaft is oscillated by the means provided for the purpose, thus tilting the casing to the position shown in Fig. 4, the casing being thereby tilted in a downward and rearward direction, thus setting or depositing the shock upon the ground. By the continued oscillation of the rock shaft 4, the cradle member 1 is now moved in an upward and forward direction to the position indicated in Fig. 3, thus moving it out of the path of the shock which remains standing upon the ground while the machine moves forwardly in the direction indicated by the arrow C. As the rock shaft is being oscillated to tilt the casing, the cover member 2 is guided by the trunnions 11 moving in the guides 13 to the position shown in Figs. 4 and 5, where it is temporarily sustained by the trunnions contacting with the lower ends of the guides, although additional stop means may be provided, if desired. As soon as the shock has become disengaged from the casing, the oscillatory movement of the rock shaft 4 is reversed, thus returning the cradle member of the casing to its initial position, said cradle member engaging and picking up the cover member, as will be readily understood, so that while the cradle member is positively restored to initial position, the cover member of the casing is carried thereby and guided to the initial bundle-receiving position.

While in the foregoing the rock shaft 4 has been described as being oscillated by means of the segment rack carried by a hand lever 10, it is desired to be understood that means may be readily devised for automatically imparting the desired oscillatory motion to said shaft from some moving part of the machine in connection with which the improved device is used.

Having thus described the invention, what is claimed as new, is:—

1. In a device of the character described, a rock shaft supported for oscillation and having a crank including radially extending arms and a connecting bight, and a cas-

ing including a cradle member supported in the bight of the crank and a cover member, said cover member being provided with laterally extending trunnions, arcuate guides for said trunnions supported rigidly on the main frame adjacent to the cradle member of the casing, and means for oscillating the rock shaft.

2. In a device of the character described, a rock shaft supported for oscillation and having a crank including radially extending arms and a connecting bight, and a casing including a cradle member supported in the bight of the crank and a cover member, said cover member being provided with laterally extending trunnions, arcuate guides for said trunnions supported rigidly on the main frame adjacent to the bottom member of the casing, and means for oscillating the rock shaft; in combination with a shield plate spaced from and supported in front of the casing.

3. In a grain shocking device, a casing comprising a cradle constituting a receiving member and a separate cover member loosely supported upon the cradle and apertured for the passage of sheaves, said cover member being provided with trunnions, a shaft tiltably supporting the cradle member, and rigidly supported guide means of arcuate shape and engaging the trunnions of the cover member to permit said trunnions to move in the arc of a circle.

4. In a corn shocking device, a casing comprising a cradle member and a cover member, the latter being apertured for the passage of sheaves, a rock shaft having radial arms connected by a bight wherein the cradle is supported to be tilted by oscillation of the rock shaft, trunnions extending from the cover member, and arcuate guides supported rigidly with reference to the cradle and the cover member and engaging the trunnions of said cover member.

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

GEORGE H. TRACY.

Witnesses:

O. E. WALTERS,
VICTOR VAN CAMP.