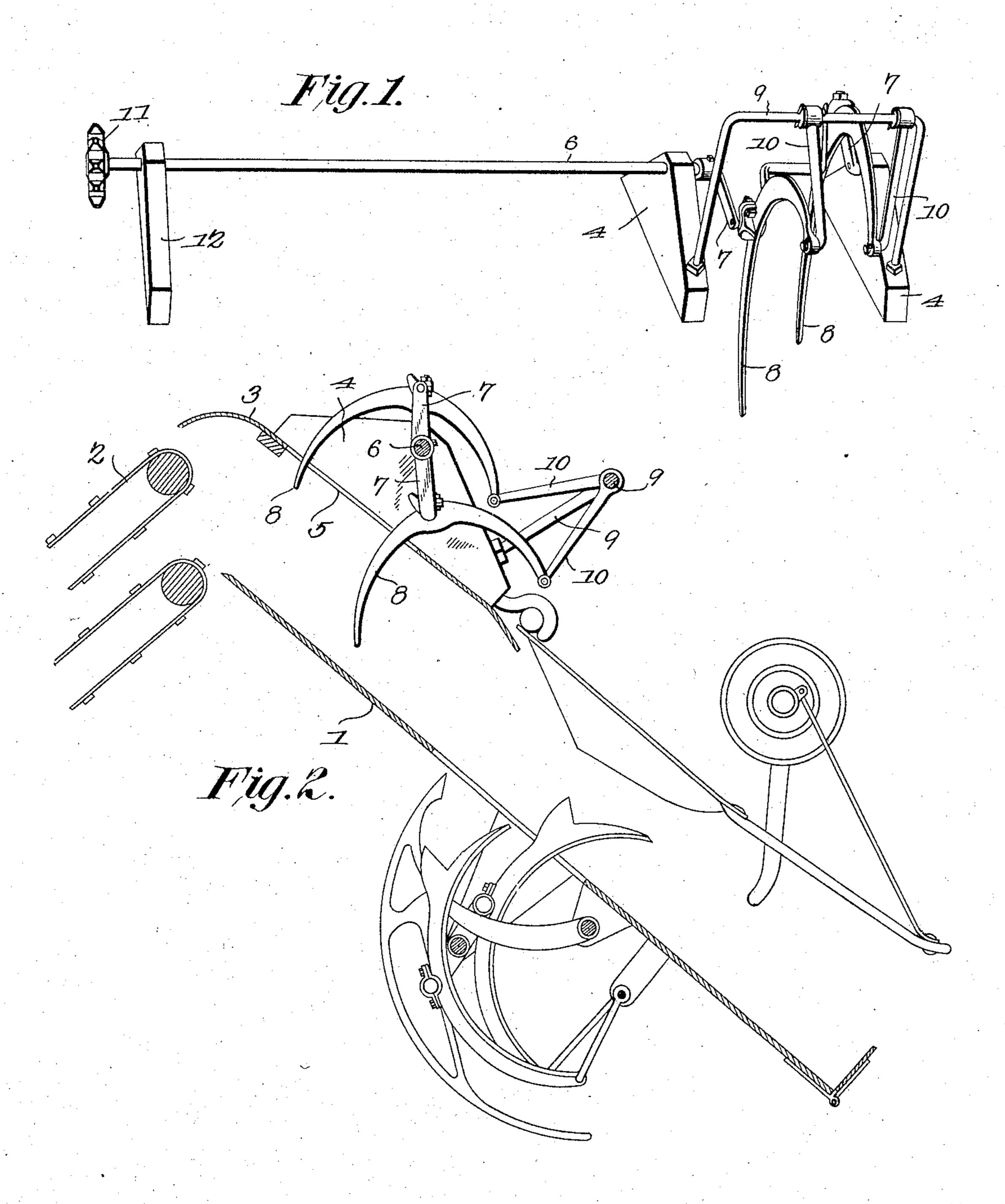
J. W. DOWNEY. GRAIN BINDER. APPLICATION FILED AUG. 15, 1904.



Witnesses Betterall Im Bagger James W. Downey,
Inventor

by Cacho-tles.

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United States Patent Office.

JAMES W. DOWNEY, OF BUFFALO, INDIANA.

GRAIN-BINDER.

SPECIFICATION forming part of Letters Patent No. 780,604, dated January 24, 1905.

Application filed August 15, 1904. Serial No. 220,815.

To all whom it may concern:

Be it known that I, James W. Downey, a citizen of the United States, residing at Buffalo, in the county of White and State of Indiana, have invented a new and useful Grain-Binder, of which the following is a specification.

This invention relates to grain-binders.

The object of the invention is to render more certain and effective the feeding of the grain to the binding mechanism in order that a compact and regular gavel may be formed to be subsequently operated upon by the binding mechanism.

The invention consists in auxiliary grain packing and feeding mechanism supported upon the deflector adjacent to the binder-deck and operating through a slot in said deflector to assist the grain in passing under said deflector.

The invention further consists in the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claim.

In the accompanying drawings has been illustrated a simple and preferred form of embodiment of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that the right is reserved to any changes, alterations, and modifications to which recourse may be had without departing from the spirit or sacrificing the advantages of the invention.

In said drawings, Figure 1 is a perspective view showing the device which constitutes the invention detached. Fig. 2 is a sectional view taken vertically through the binder-deck and adjacent parts of a grain-binder looking

4° in the direction of the butt-board.

Corresponding parts in both figures are indicated by similar numerals of reference.

This invention may be applied to grainbinders of various kinds and patterns, and in 45 the accompanying drawings has been illustrated only the conventional binder-deck 1, a portion of the grain-elevator 2, adjacent to

said binder-deck, and the deflector 3, disposed above the grain-elevator.

The invention comprises a pair of bearing- 50 blocks 44. secured upon the deflector 3 at opposite sides of the slot or opening 5, formed in the latter.

6 is a shaft journaled in the bearings 4 4 and provided between said bearings with a 55 pair of cranks 7 7, having packing-fingers 8 journaled thereon.

The bearing-blocks 4 4 are connected by an arch or yoke 9, upon which are mounted links 10 10, the free ends of which are connected 60 pivotally with the free ends of the packing-fingers.

One end of the shaft 6 carries a sprocket-wheel 11, adapted to receive motion from any suitable source of power, which may be any 65 convenient driven shaft in the harvester to which the device is applied. An auxiliary bearing 12 is also provided for the end of the shaft which carries the sprocket-wheel 11.

In operation the packing-fingers driven hy 70 the cranks 7 upon the shaft 6 will work through the slot in the deflector and will assist in forcing the grain passing under the deflector in the direction of the binder-deck, where it is operated upon in the usual manner. 75

Having thus described the invention, what is claimed is—

In a grain-binder, the combination with a conveyer, a binder-deck and a deflector disposed above the conveyer adjacent to the 80 binder-deck, of bearing-blocks disposed adjacent to an aperture in the deflector, an arch connecting said bearing-blocks, a driven shaft journaled in the latter and provided with cranks between said blocks, packer-fingers 85 journaled upon the cranks, and links connecting said fingers with the arch.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

JAMES W. DOWNEY.

Witnesses:

GEO. F. MARVIN, B. A. VOGEL.