

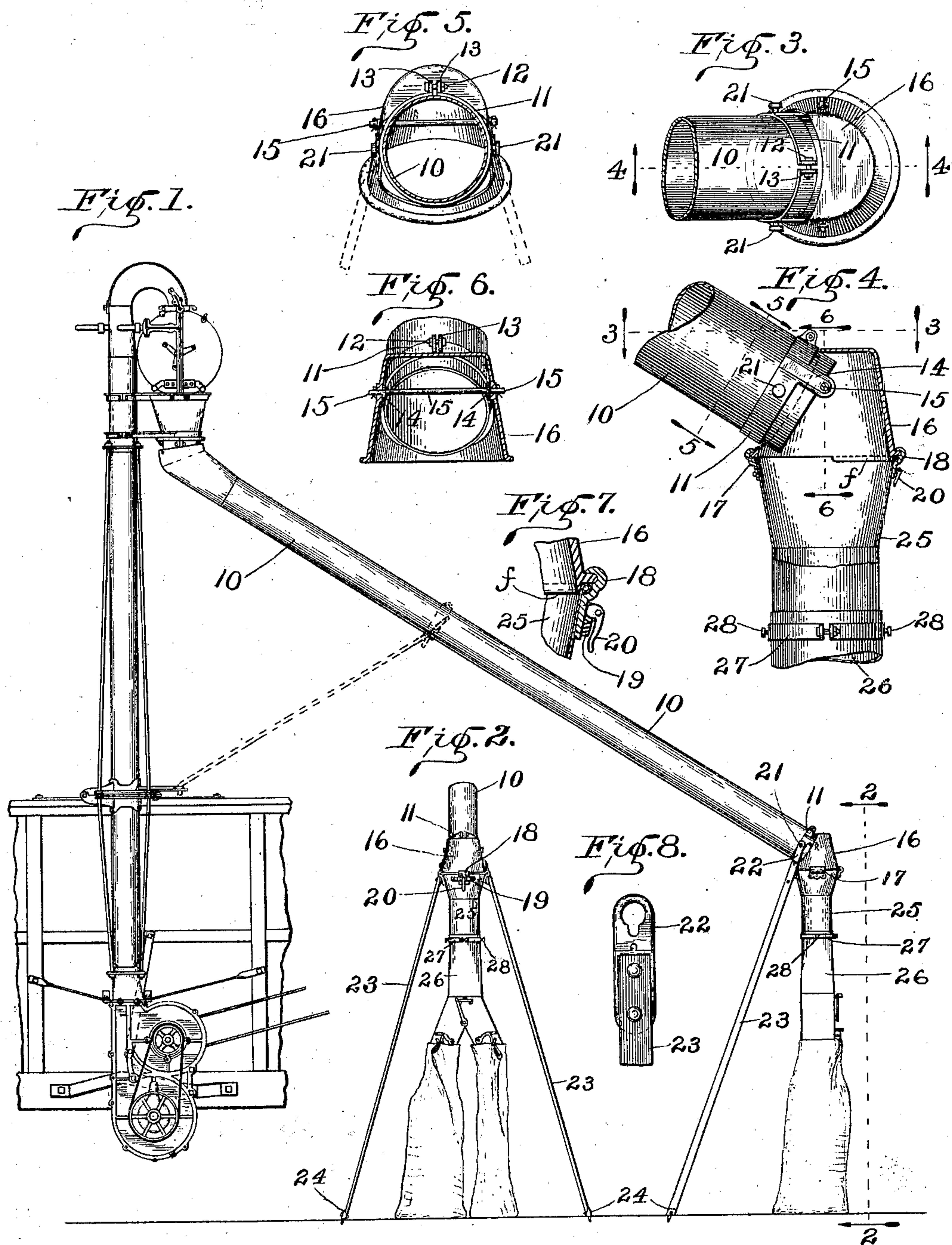
No. 756,931.

PATENTED APR. 12, 1904.

C. BRADFORD.
BAGGING ATTACHMENT FOR GRAIN ELEVATORS.

APPLICATION FILED JAN. 5, 1903.

NO MODEL.



WITNESSES:

C. S. Prys.
A. E. Gearing

INVENTOR.

Chester P. Bradford,

UNITED STATES PATENT OFFICE.

CHESTER BRADFORD, OF INDIANAPOLIS, INDIANA.

BAGGING ATTACHMENT FOR GRAIN-ELEVATORS.

SPECIFICATION forming part of Letters Patent No. 756,931, dated April 12, 1904.

Application filed January 5, 1903. Serial No. 137,943. (No model.)

To all whom it may concern:

Be it known that I, CHESTER BRADFORD, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Bagger Attachments for Grain-Elevators, of which the following is a specification.

The object of my present invention is to provide a suitable means for attaching the device known as a "bagger" to the discharging end of the down-spout or discharging-conductor of grain-elevators used as attachments to threshing-machines—such, for example, as that shown in Letters Patent of the United States No. 641,045, issued January 9, 1900, to the Pneumatic Elevator and Weigher Company upon the application of James B. Schuman; but as the elevator itself is not a part of my present invention it will not be further described herein, except incidentally in describing the invention.

Referring to the accompanying drawings, which are made a part hereof and on which similar reference characters indicate similar parts, Figure 1 is a side elevation of a pneumatic grain-elevator similar to that shown in Letters Patent No. 641,045, above referred to, provided with a bagger and the means of attaching the same such as contemplated by my invention; Fig. 2, a front elevation showing a fragment of the lower end of the discharging or conductor spout of the elevator, the bagger, the means of connecting said bagger to said spout, and the props by which the same are supported and steadied; Fig. 3, a top or plan view showing a fragment of the lower end of the conductor-spout and the means of attaching the bagger thereto on an enlarged scale; Fig. 4, a view, partly in side elevation and partly in central vertical section, at the point indicated by the dotted line 4 4 in Fig. 3; Fig. 5, a transverse sectional view of the spout, showing the bagger attachment in perspective as seen from the dotted line 5 5 in Fig. 4; Fig. 6, a detail vertical sectional view through the bagger attachment at the point indicated by the dotted line 6 6 in Fig. 4, showing the lower end of the said discharging conductor-spout in perspective;

Fig. 7, a detail sectional view of the removable bagger-clip and immediately adjacent parts on a still further enlarged scale; and Fig. 8, a fragmentary view, on an enlarged scale, of the upper end of one of the props.

As hereinbefore indicated, the elevator itself is or may be of a construction already produced. Upon the lower end of the discharging conductor-spout 10 of the elevator I secure a suitable band 11, preferably by means of a bolt 12, passing through ears 13, forming the adjacent ends of said band. Extending out from the band 11 are the arms 14, which are adapted to carry the pivot-rod 15, and upon this pivot-rod the head or hopper 16 is mounted. This hopper or head 16 is provided with a track-flange at the lower open end, upon which the bagger is mounted by means of suitable clips 17 and 18, which are secured to the upper portion 25 of said bagger, which (it may be here remarked) is composed of said upper part and the lower part 26, held together in any desired relation by the clamping-ring 27, which ring is provided with knobs or ears 28, which may, if desired, be utilized in staying or supporting the bagger by means of the props, hereinafter described, or otherwise. The clips 17 are preferably three in number and are riveted firmly to the upper bagger portion 25. The clip 18 is mounted in a housing 19, where it is adapted to be held by a cam-clamping lever 20. The bagger is thus adapted to be attached and removed at pleasure by simply manipulating the cam-lever and the removable clip, which when removed permits the others to be slipped sidewise off the track-flange on the lower edge of the head or hopper 16. The head 16 itself may be of any suitable form for the purpose, it serving merely as a hopper to receive the grain from the discharging conductor-spout 10 and as a track or support for the bagger, which is mounted thereon. It is shown as substantially a truncated cone, with one side cut out suitably to admit the end of the elevator conductor-spout. I prefer this form for this particular style of machine, as it brings the parts into close relation, giving a compact and inexpensive construction. The weight of the bagger is supported at a central point by

the pivot-rod 15, and is thereby well balanced. The track-like flange which receives the clips gives a turn-table construction, so that the bagger may be revolved to face in any direction. This is of advantage in always permitting the operative handling the sacks of grain to so position the bagger as to be able to stand on the windward side thereof in using it, and thus to as great an extent as possible avoid standing in the dust.

The grain in coming down the conductor-spout 10 of course strikes against the opposite side of the head or hopper 16 and the portion of the bagger (or other suitable grain receiving and discharging device) which is at the time immediately therebelow. The necessary looseness between the parts would, if no provision was made to close it, leave a crack at this point through which some of the grain might escape. I have therefore formed a small flange *f* at this point at the lower edge of the head or hopper 16, which extends down within the upper edge of the upper portion 25 of the bagger, and thus covers and closes the crack in question and prevents any escape of grain at this point.

Upon each side of the band 11 are knobs or ears 21, which are provided to receive the upper end of the props by which the parts in question are supported and steadied. These props preferably consist of upper irons 22, adapted to engage with said ears, wooden bars 23 of appropriate length, and pointed irons 24 on the lower ends of said bars, adapted to enter the ground or floor sufficiently to prevent slipping. These props or similar ones of a little shorter length may also be used to support or steady the bagger directly by means of the knobs or ears 28 thereon.

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

1. The combination, in a grain-elevator, of a pivotally-attached and downwardly-inclined discharging spout or conductor through which the grain is discharged from said elevator, a hopper-support upon the lower end of said conductor, an inverted-hopper-like head pivotally secured to said support and having an open side into which the end of said conductor extends, and a grain receiving and discharging device mounted by a swiveling joint at the lower edge of said head.

2. The combination, in a grain-elevator, of the discharging conductor-spout thereof, a band adapted to be secured to the discharging end of said spout and provided with arms or bearings extending out therefrom, a hopper or head-piece pivotally carried from said arms or bearings, and a grain receiving and discharging device mounted on said hopper or head-piece.

3. The combination, in a grain-elevator, of the discharging conductor-spout thereof, a band secured to the discharging end of said

spout and provided with knobs or ears and also with arms or bearings, a hopper or head-piece carried from said arms or bearings, a grain receiving and discharging device carried on said hopper or head-piece, and props extending from said knobs or ears to the ground whereby said grain receiving and discharging device may be strongly and rigidly supported independently of the machine but without interfering with the manipulation of the grain receiving and discharging device itself.

4. The combination, in a grain-elevator, of the downwardly-inclined conductor, a grain-receiving hopper or head carried by said conductor, a grain receiving and discharging device swivelingly mounted upon said hopper or head, ears above said grain receiving and discharging device on a part attached to said conductor, and props the upper ends whereof are adapted to separably engage with said ears and which extend to the ground and constitute a rigid support for the grain receiving and discharging device independently of the machine from which the grain is received.

5. The combination, in a grain-elevator, of a conductor through which the grain is discharged therefrom, a pivoted terminal at the lower end of said conductor, a grain receiving and discharging device swivelingly supported from said terminal, and props extending from the terminal structure to the ground and thus adapted to support and steady the grain receiving and discharging device while leaving the latter free to swivel about its immediate support.

6. The combination, in a grain-elevator, of the discharging spout or conductor, a grain receiving and discharging device, and an intermediate hopper or head upon which said grain receiving and discharging device is mounted and into which said conductor discharges, said hopper or head being provided with a flange at the point opposite the mouth of the conductor which extends down within the upper edge of the grain receiving and discharging device, thus covering the crack at that point and preventing escape of any grain.

7. The combination, in a grain-elevator, with the discharging spout or conductor, of a grain-receiving head or hopper supported by said conductor and provided with a track-flange at its lower edge, a grain receiving and discharging device carried from said grain-receiving head or hopper, clips attached to said grain receiving and discharging device forming the means of engagement to said track-flange, one of said clips (as 18) being removable, a housing (as 19) in which said removable clip is mounted, and a cam-lever (as 20) mounted in said housing and adapted to impinge upon and hold said clip firmly in place when in one position and to permit said clip to be removed and the grain receiving

and discharging device thus removed when in the other position.

8. The combination, with a grain-elevator, of a grain-receiving head or hopper provided with a track-flange at its lower edge, a grain receiving and discharging device carried from said grain-receiving head or hopper, clips attached to said grain receiving and discharging device forming the means of engagement to said track-flange, one of said clips being removable, a housing in which said removable clip is mounted, and a cam-lever mounted in said housing and adapted to impinge upon

and hold said clip firmly in place when in one position and to permit said clip to be removed and the grain receiving and discharging device thus removed from said grain-receiving head or hopper when in the other position. 15

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 20 29th day of December, A. D. 1902.

CHESTER BRADFORD. [L. s.]

Witnesses:

JAMES A. WALSH,
ARTHUR M. HOOD.