F. BRIGGS.

CONVEYER.

APPLICATION FILED APR. 27, 1910.

985,107. Patented Feb. 21, 1911.

Fig. 1

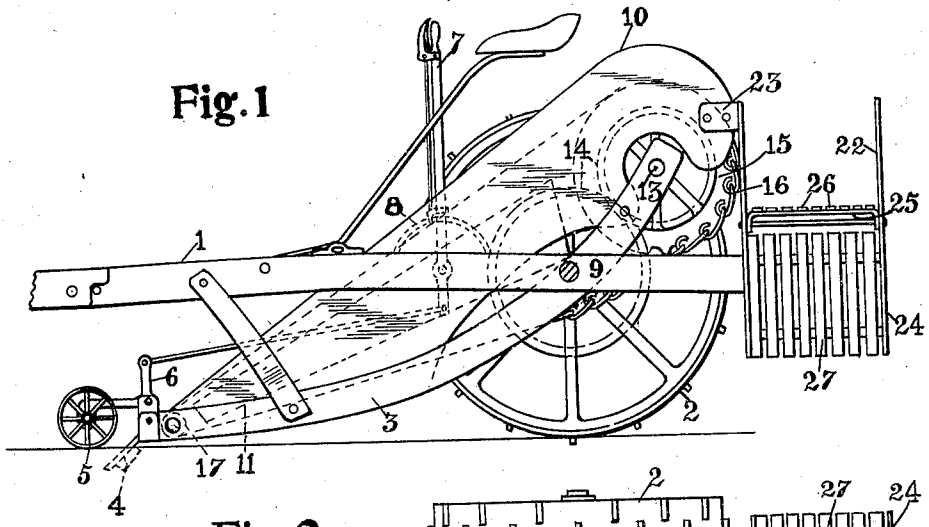


Fig. 2

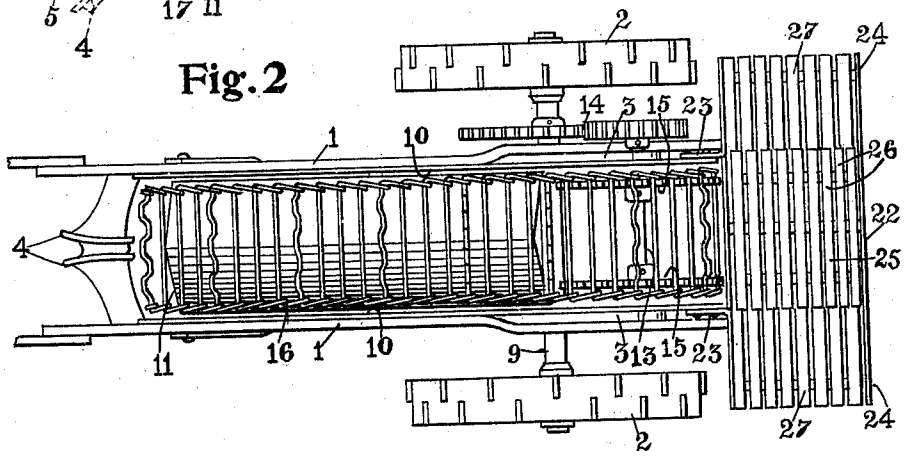


Fig. 3

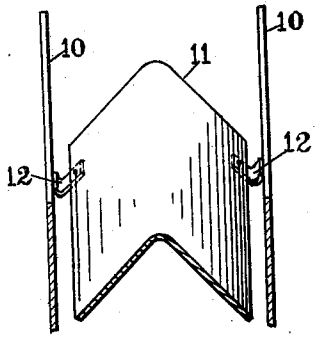


Fig. 4

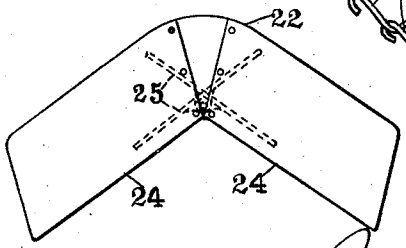
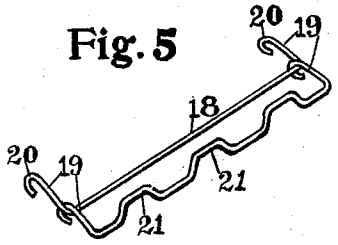


Fig. 5



Witnesses

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UNITED STATES PATENT OFFICE.

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CONVEYER.

985,107. Specification of Letters Patent. **Patented Feb. 21, 1911.**

Original application filed September 23, 1909, Serial No. 519,181. Divided and this application filed April 27, 1910. Serial No. 557,910.

To all whom it may concern:

Be it known that I, FRANK BRIGGS, a citizen of the United States of America, residing at Leavenworth, in the county of Chelan and State of Washington, have invented certain new and useful Improvements in Conveyers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a conveyer and more particularly to one adapted for use in beet harvesters of the character described in my application for beet harvester, filed September 23, 1909, Serial No. 519,181, of which this is a divisional application. In machines of this class it is desirable to remove any dirt clinging to the sides of the beets before they are delivered to the machine and it is also advantageous to have the beets discharged either at one side or the other of the machine to facilitate their removal from the field.

This invention provides more especially for raddling the beets thoroughly after they are lifted and also for discharging them at either side of the machine as preferred.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claim.

In the drawings, Figure 1 is a view in side elevation, with a traction wheel removed, of a portion of the beet harvester equipped with a conveyer embodying features of the invention; Fig. 2 is a plan view thereof; Fig. 3 is a view in detail of a portion of a conveyer chute; Fig. 4 is a view in detail of an adjustable delivery trough; and Fig. 5 is a view in detail of links of a conveyer chain.

Referring to the drawings, a main frame 1 of suitable design is supported by traction bearing wheels 2 and has a depending sub-frame 3, which in the type of machine herein indicated, terminates in suitable beet lifting members 4. The latter are adapted to underrun a beet and draw it from the ground as the machine moves forward, the depth of penetration below the surface being determined by the position of wheels adjustably supported by a bell crank 6 pivoted to the sub-frame and adapted to be tilted by a hand lever 7 interlocking with a quadrant 8 on the main frame. Obviously any other preferred means of adjustment may be used.

An inclined conveyer chute is mounted on the sub-frame 3 with its upper rear delivery end above and behind the shaft 9 of the bearing wheels 2. In preferred form, the chute consists of parallel side members 10 supported on the sub-frame 3, and a bottom plate 11 longitudinally crowned throughout its length, or of inverted V-shape in cross section, that is secured to the side members 10 by suitable means, as brackets 12, with the margins of the bottom plate each separated from the adjacent side by an interval.

A shaft 13 parallel to the wheel shaft 9 is journaled in the upper end of the sub-frame 3 and is driven by the traction wheels 2 through suitable means, as, for example, a gear train indicated at 14. The traction wheels have any suitable compensating connection with the shaft 9 such as is common in agricultural machinery and is not indicated in detail herein. Sprocket wheels 15 are secured on the shaft 13 and drive an endless conveyer 16 that passes around idler sprockets 17 at the lower end of the chute and sweeps upward over the bottom plate 11 thereof.

This conveyer may be of any suitable design but in preferred form consists of a series of links each made of a round bar 18 with its end portions 19 turned transversely back and inward and formed at the extremities into eyelets 20 adapted to hook around an adjacent link bar. Certain of the link bars are bent between their end portions 19 to form off-sets or lugs 21 which lie in a plane transverse to the plane of the link arms. The lower portion of the conveyer chute is so disposed in relation to any lifting members that may be used as for example, the pullers 4, that the beets drawn up by the latter are dropped upon the conveyer chain and carried to the delivery end of the chute. The latter discharges into a delivery trough 22 which is transversely disposed on suitable hangers 23 across the rear of the machine and has oppositely inclined arms 24. A gate 25 is pivotally secured at the crest of the trough so as to be tilted into the plane of the bed of either arm, thus causing beets delivered by the chain to fall either to one side or the other.

Preferably the gate is formed of parallel spaced rods 26 while an open grille work 27 forms the bottom of the delivery trough.

By this arrangement, the beets are effectively raddled as they are drawn up the trough by the chain and the dirt falls away from the latter through the intervals between the bottom and side of the chute.

Obviously, changes in details of construction may be made without departing from the spirit of the invention and I do not wish to limit myself to any particular form or arrangement of parts.

What I claim as my invention is:—

In a beet harvester, a main frame, traction wheels supporting the rear end thereof, an inclined conveyer chute secured to the frame with its upper delivery end above the traction wheels, a bottom board in the chute of inverted V-shape in cross section with its margins at an interval from the side of the chute, an endless conveyer chain sweeping the bottom board, and the traction bearing wheels for the frame operatively connected to the conveyer chain.

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

FRANK BRIGGS.

Witnesses:
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