N. BRIGHAM.

CONVEYER.

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1,126,696.

Patented Feb. 2, 1915.

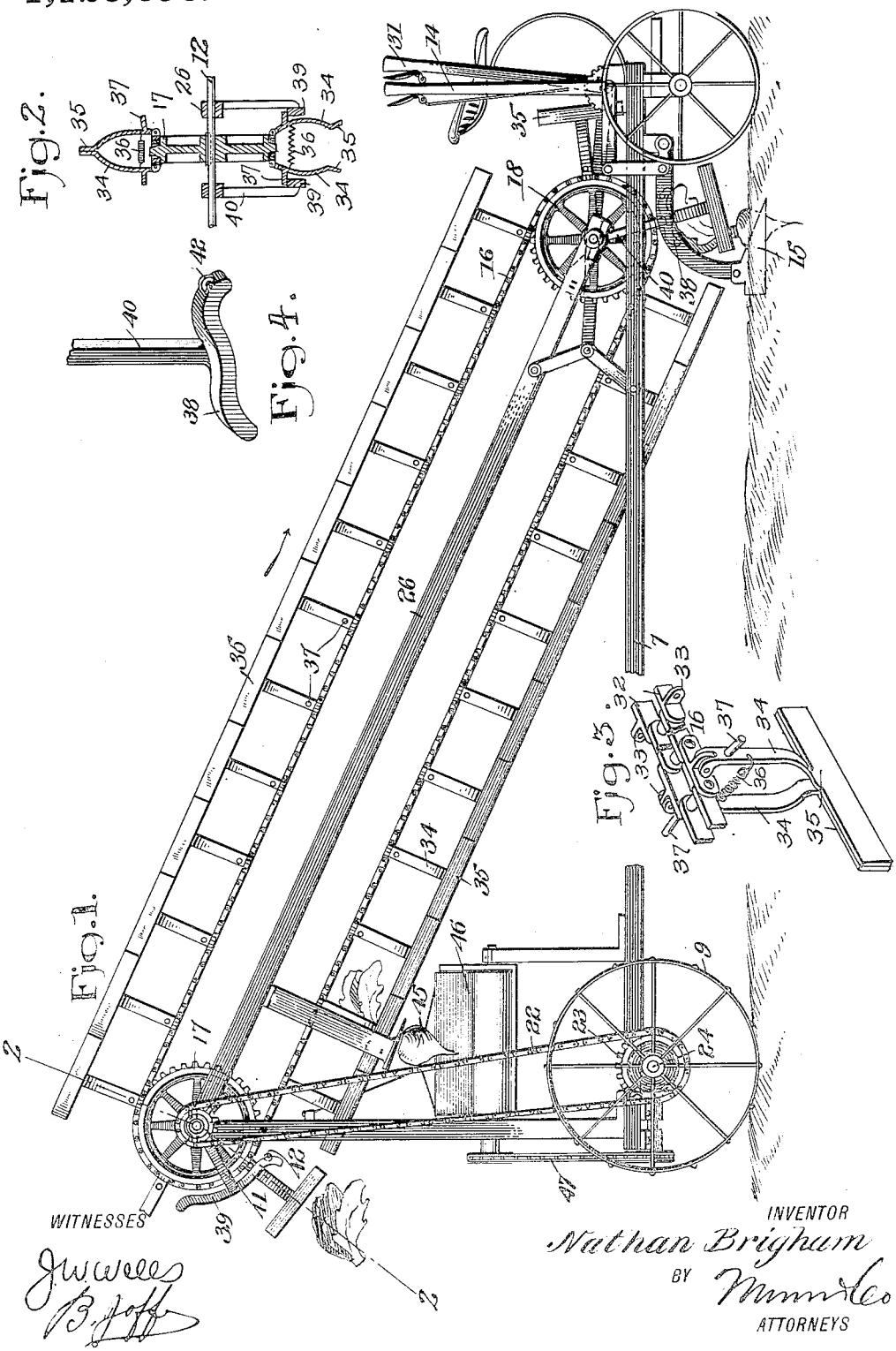


Fig. 1.

Fig. 2.

Fig. 4.

Fig. 5.

WITNESSES

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CONVEYER.

1,126,696. Specification of Letters Patent. Patented Feb. 2, 1915.

Application filed May 27, 1913. Serial No. 770,153.

To all whom it may concern:

Be it known that I, NATHAN BRIGHAM, a citizen of the United States, and a resident of Whitewood, in the county of Lawrence and State of South Dakota, have invented a new and Improved Conveyer, of which the following is a full, clear, and exact description.

The invention relates to conveyers, and has reference more particularly to conveying means for beet harvesters, which means are adapted to pick up beets after the same have been rooted out of the ground by the plows of the harvester and to convey them to a proper place.

Among the objects of the invention is the provision of a a simple, strong and efficient conveyer which will pick up and deliver articles at predetermined places.

The invention consists of the construction and combination of parts to be more fully described hereinafter and fully set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which like characters indicate corresponding parts in all the views and in which:

Figure 1 is a side elevation of a beet harvester provided with a conveyer embodying my invention; Fig. 2 is a section on line 2—2, Fig. 1, showing one clamping member; Fig. 3 is a perspective view of the chain and the clamping member attached thereto; and Fig. 4 is a perspective view of the cam surface causing the clamping members to open when the same come in contact with it.

Referring to the drawings, the conveyer is shown in connection with a beet harvester whereon the conveyer is mounted to pick up the beets by the leaves when they are uprooted by the plows 15 of the harvester and carry them to a proper place, when the hold of the conveyer members on the beet is released.

The conveyer proper consists of an endless chain 16 engaging sprocket wheels 17 and 18 which are carried on a frame 26 suitably mounted on the harvester proper. The endless chain 16 has a number of its exterior links 32 provided each with a central, outwardly projecting lug 33 to which is pivotally attached a member 34, the free end of which is provided with a transverse portion 35. Since the exterior links of each side of the chain are opposite each other, the members 34 pivotally secured to these links are similarly opposite; and the transverse portions 35 of the members 34 are made to contact with each other by means of a tension spring 36 connecting the oppositely disposed members 34 adjacent their pivotal point. The two members 34, so pivotally mounted on the exterior links 32, form a clamping member, of which the transverse portions 35 form the jaws of the engaging element. Each of the members 34 is provided with an exterior lug 37 adjacent the pivotal connection of the member, adapted to engage cam surfaces 38 and 39, each of which surfaces is rigidly secured to the ends of the frame 26 by means of upright portions 40 and 41 respectively.

The clamping members formed by the juxtaposed members 34 are mounted on chain 16 to form a continuous series of the clamping members which are substantially parallel to each other on the parts of the chain lying between the sprocket wheels 17 and 18 and converge from each other where the chain is on the sprocket wheel (see Fig. 1). The juxtaposed members 34 are drawn toward each other as previously described by means of a tension spring 36. The members 34 are caused to part from each other when the exterior lugs 37 are passing over the cam surfaces 38 and 39. To facilitate the engagement between the lugs 37 and the cam surfaces at the beginning, each of said surfaces is provided with a roller 42. The cam surface 38 is so located with reference to the plows that when the plows root out a beet, the exterior lugs 37 and the members 34 are just leaving the rear portion of the cam surface 38. The spring 36 draws the two oppositely disposed portions 34 together, thereby causing the juxtaposed transverse portion 35 to clamp the leaves of the beet, as shown in the drawing.

The endless chain 16 can be set in motion by either of the sprockets, but as shown in the drawing its movement is controlled by means of an endless chain 22 connecting the sprocket 17 to the rear wheels of the harvester. The beet picked up by the portion 35 of the members is carried until the exterior lugs 37 of the member 34 come in engagement with the cam surface 39 where the separation between the members 34 takes place and the leaves clamped between the portions 35 of the members 34 are released. It is understood that the relative distance

between the cam surfaces 39 and 40 can be varied to pick up and discharge the articles at desired places.

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

1. In a conveyer, an endless chain having exterior links; lugs on said exterior links; members pivotally attached to said lugs each having a transversely disposed portion at its non-pivoted end; a resilient member normally drawing together the oppositely disposed members; and an exterior lug on each of said members for the purpose set forth.

2. In a conveyer, an endless chain; lugs formed on the exterior portion of said chain; clamps pivotally attached to said lugs; means normally tending to close said clamps; cam surfaces for said clamps; and means on said clamps adapted to engage said cam surfaces, whereby said clamps are opened.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NATHAN BRIGHAM.

Witnesses:
H. T. COOPER,
T. O. MITCHELL.