

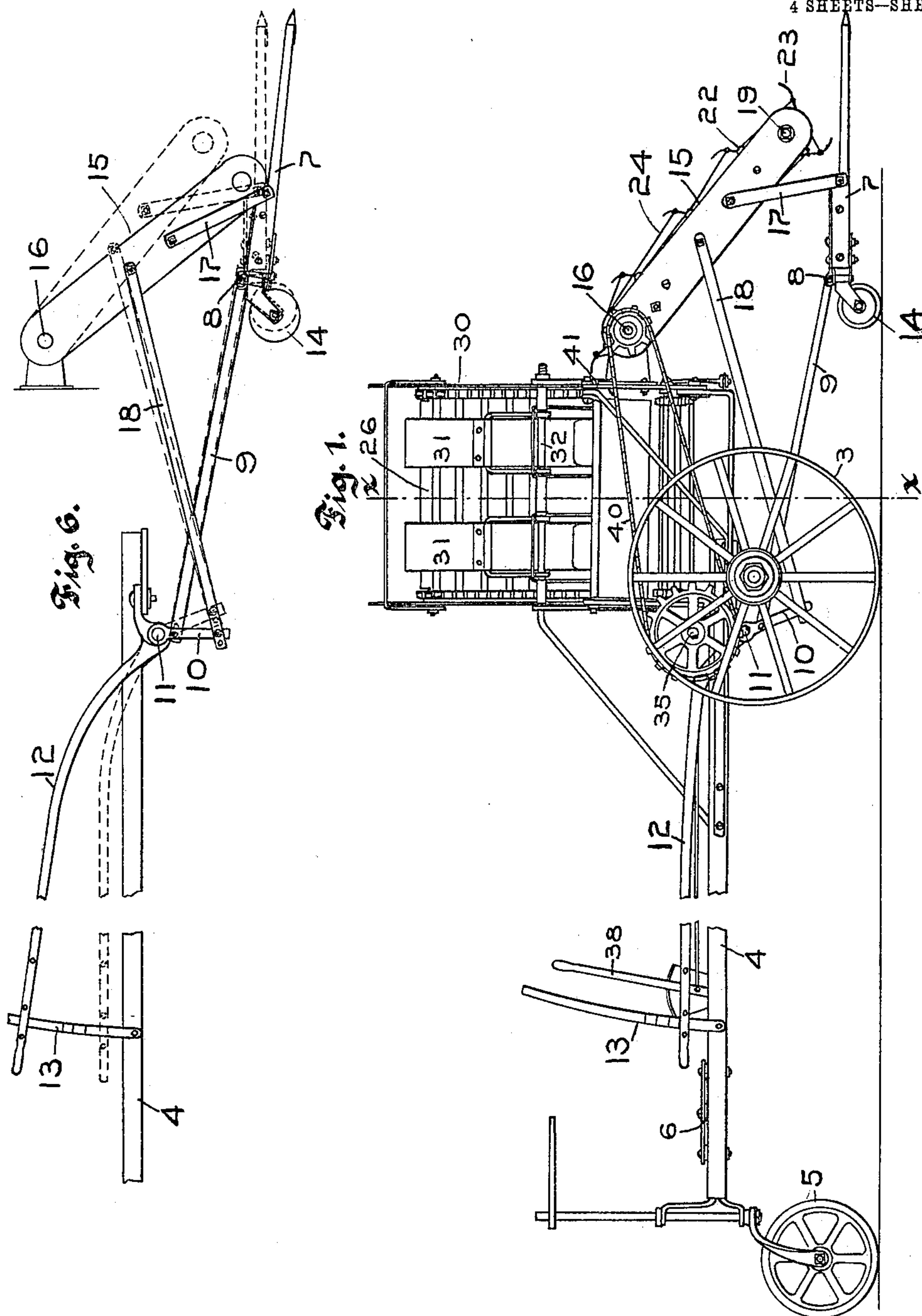
No. 819,776.

PATENTED MAY 8, 1906.

E. LÜMATTA.  
SHOCK LOADING MACHINE.

APPLICATION FILED JUNE 6, 1905.

4 SHEETS—SHEET 1.



*Witnesses,*

W. H. Palmer.  
Emily F. Otis.

*Inventor;*

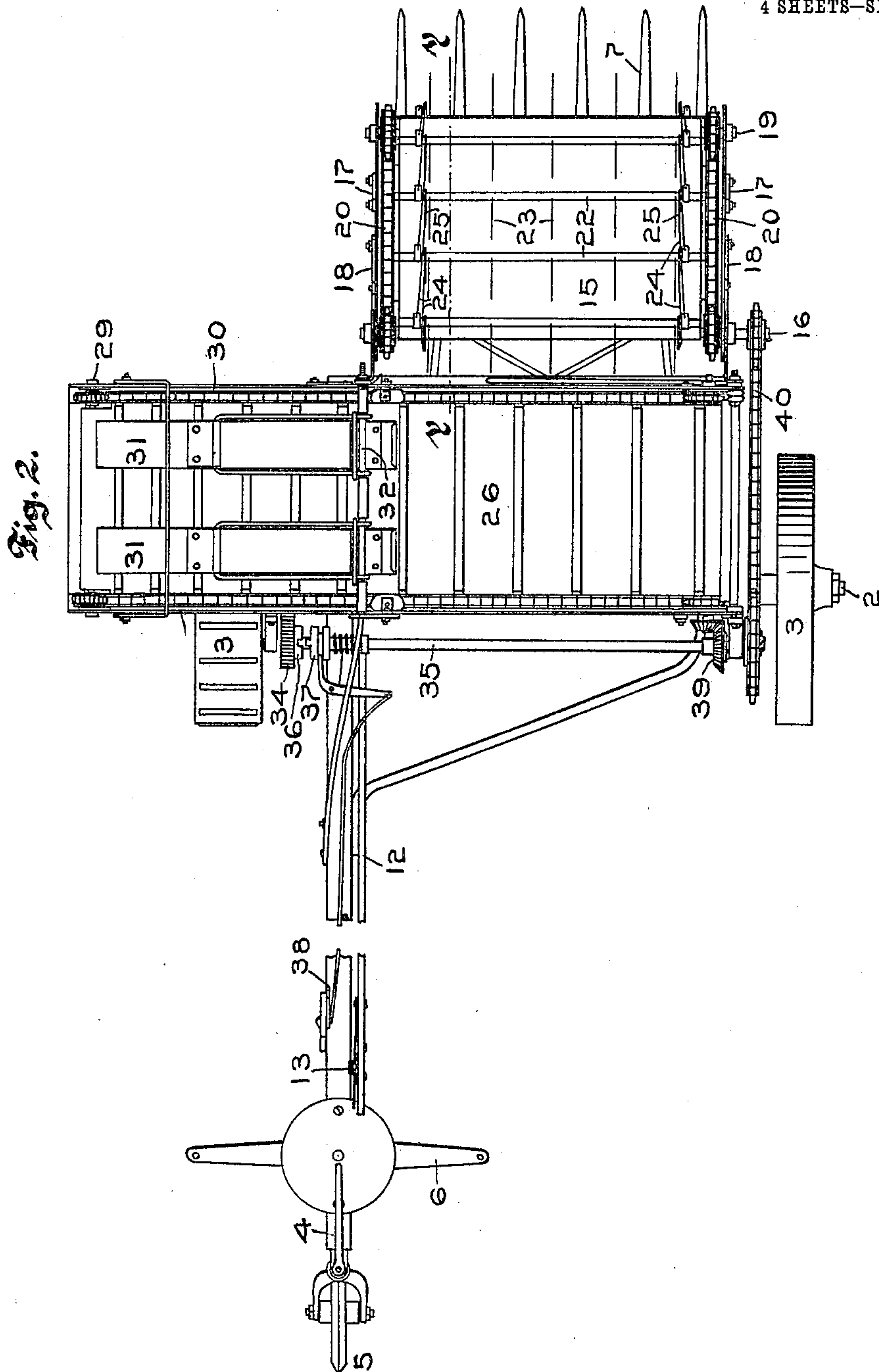
Emel Siimatta.  
by Jothrop Johnson  
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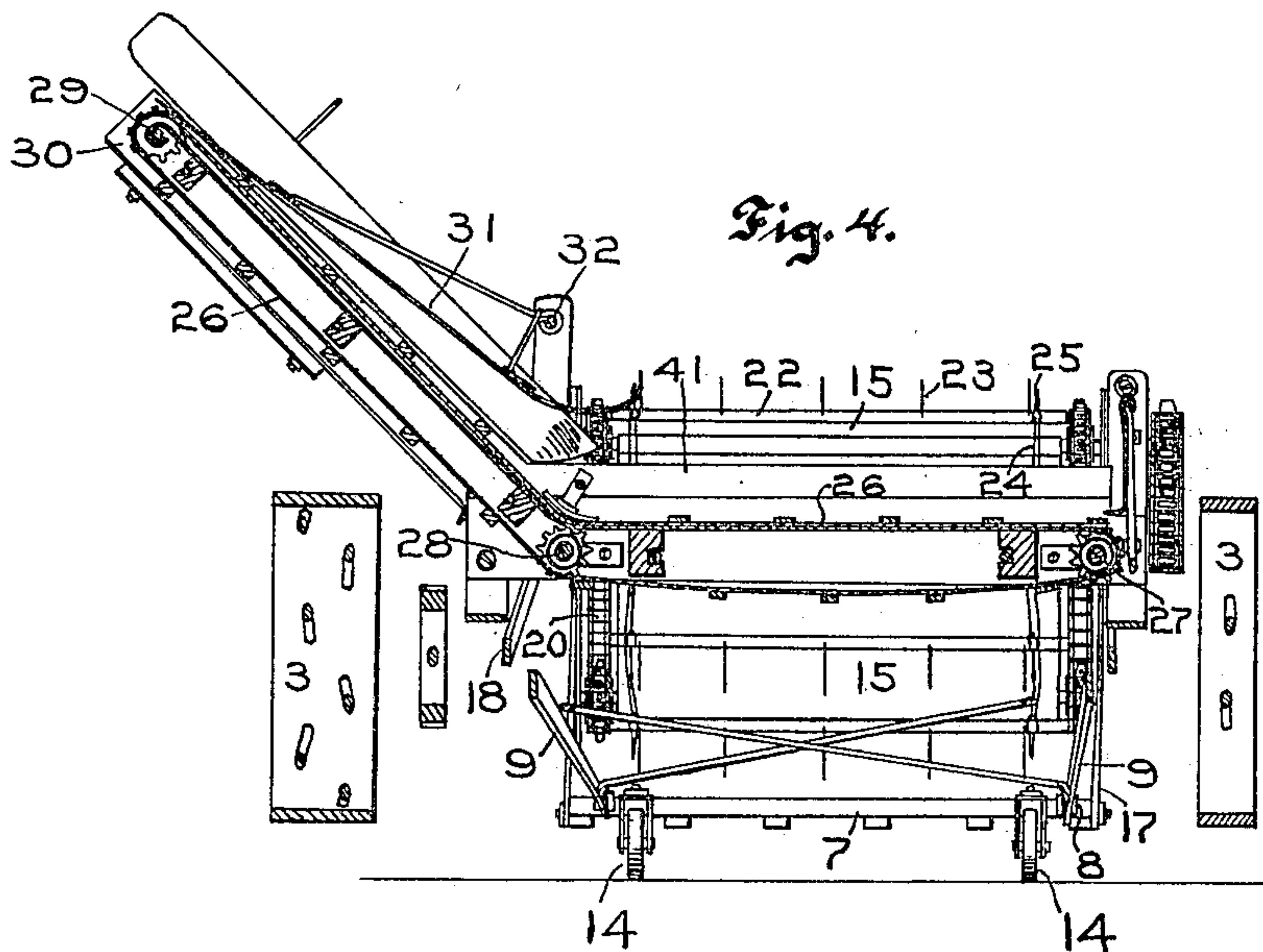
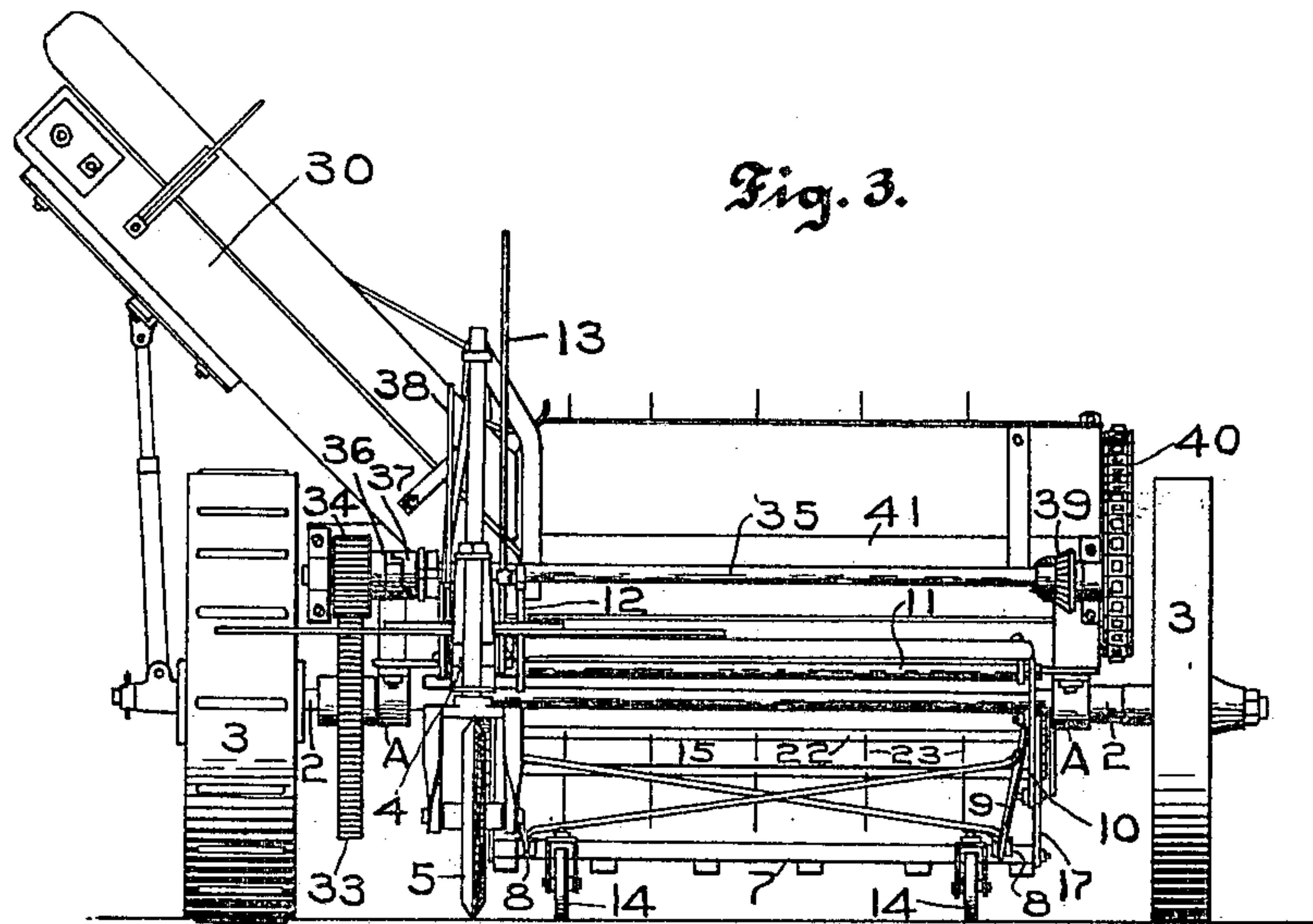
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4 SHEETS—SHEET 3.



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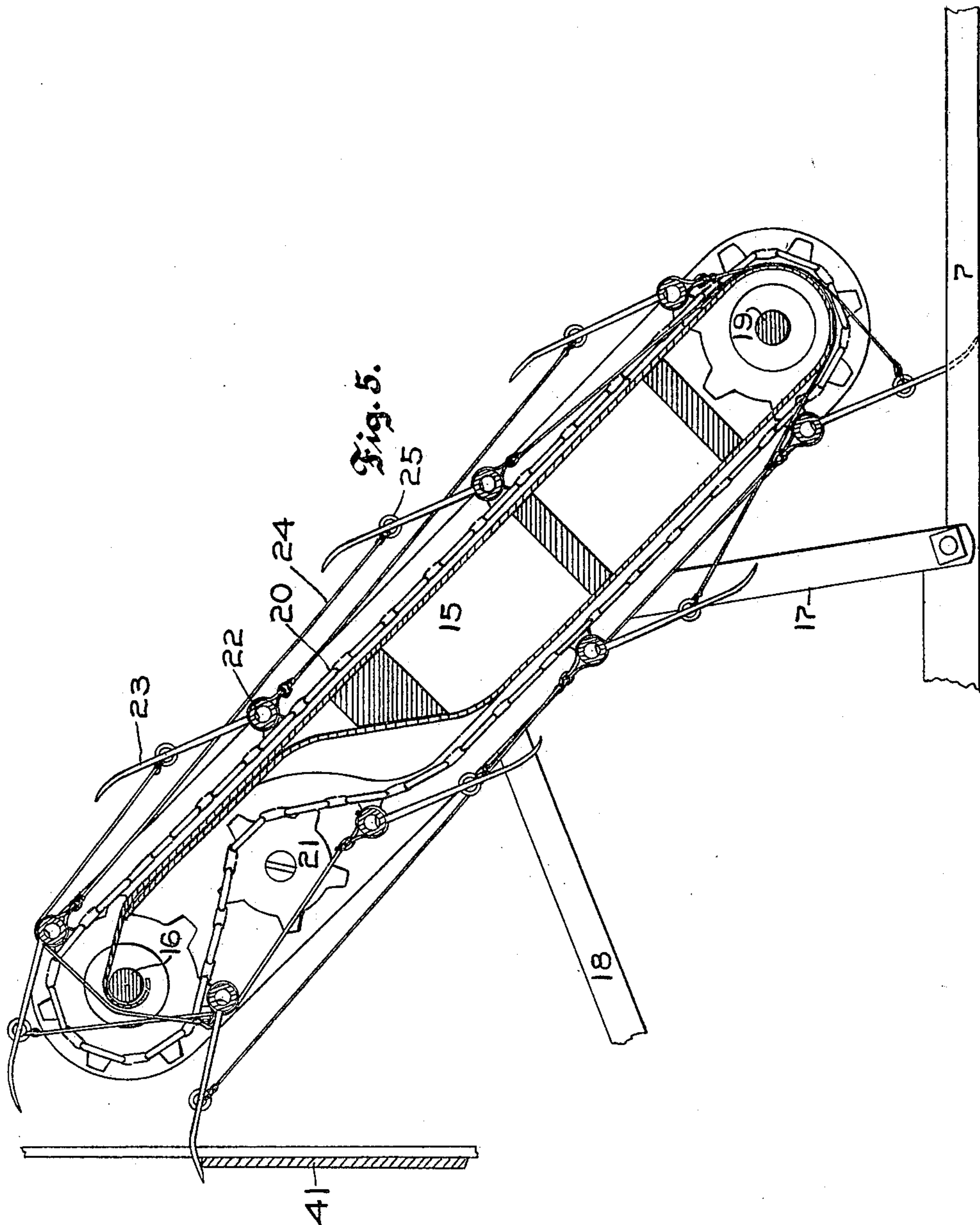


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4 SHEETS—SHEET 4.



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# UNITED STATES PATENT OFFICE.

EEMEL LUMATTA, OF SAVO, SOUTH DAKOTA.

## SHOCK-LOADING MACHINE.

No. 819,776.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed June 6, 1905. Serial No. 263,920.

*To all whom it may concern:*

Be it known that I, EEMEL LUMATTA, a citizen of the United States, residing at Savo, in the county of Brown and State of South Dakota, have invented certain new and useful Improvements in Shock-Loading Machines, of which the following is a specification.

My invention relates to improvements in shock-loading machines designed for picking up the shocks and depositing them in a suitable receptacle.

To this end my invention consists in the features of construction and combination hereinafter particularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of the invention. Fig. 2 is a plan view of the same. Fig. 3 is a rear end elevation. Fig. 4 is a section on line *x x* of Fig. 1. Fig. 5 is a section on line *y y* of Fig. 2, and Fig. 6 is a detail of the mechanism for adjusting the position of the gathering-fork and connected elevator.

In the drawings, A represents the framework of the machine supported upon the transverse shaft 2, provided with wheels 3, one of which is preferably made heavier to constitute a driving-wheel.

4 represents a rearwardly-extending tongue provided at its rear end with a steering-wheel 5 and with a whiffletree 6.

Extending forwardly of the machine is a gathering-fork 7, having pivotal support 8 in the forward ends of the frame 9; the rear ends of the frame having pivotal connection with lever-arms 10, said lever-arms extending downwardly from the ends of a transverse shaft 11, having journal-support in the frame of the machine. The shaft 11 is adapted to be rotated by a rearwardly-extending arm 12, having adjustable connection at its rear end with a quadrant 13. The rear end of the gathering-fork is supported upon suitable wheels 14.

Supported above the gathering-fork and adjustably connected therewith is an elevator 15. The elevator is supported at its upper end on a shaft 16, journaled in the framework of the machine, and at its lower end is pivotally connected by a strap 17 with the rear end of the gathering-fork. The elevator is also pivotally connected by a bar 18 with the lower end of the arm 10, so as to be adjusted with the gathering-fork. Running over sprockets carried by the supporting-shaft 16 at the elevator and by a similar shaft

19, journaled in the lower end of the elevator, is a sprocket-chain 20, the sprocket-chain running over an inset sprocket 21 upon the under side of the elevator adjacent to the upper sprocket-wheel for the purpose hereinafter set forth. The sprocket-chain 20 carries a series of pivotally-supported cross-bars 22, each carrying a series of outwardly-extending fingers 23. The relative positions of the tooth-supporting bars 22 is determined by cords 24, connecting outwardly-extending arms 25, carried by said cross-bars.

Supported in the framework at the rear of the elevator 15 is a transverse conveyer 26, extending horizontally across the machine and upwardly at one side thereof. The conveyer 26 runs over sprockets carried by the shafts 27 and 28 on opposite sides of the machine and by a shaft 29 in the upper end of the extension conveyer-frame 30. A pair of weighted levers 31 is pivotally supported upon a cross-bar 32 above the upwardly-extending part of the transverse conveyer in order to assist in holding the shocks upon said conveyer while the same are being discharged. A rod 43 assists in supporting the elevator extension 30.

The elevator and transverse conveyer are actuated from the drive-wheel by the following mechanism: A spur-gear 33, mounted upon the main shaft, intermeshes with a pinion 34, loosely mounted upon a transverse shaft 35. The pinion 34 is provided with a clutch member 36, intermeshing with a clutch 37, slidable upon the shaft, the clutch member 37 being connected with an actuating-handle 38. The opposite end of the shaft 35 has bevel-gear connection 39 with the shaft 27 of the transverse conveyer and has chain-and-sprocket connection 40 with the shaft 16 of the elevator. The elevator and transverse conveyer are thus actuated from the drive-wheel in the travel of the machine.

Fig. 5 illustrates the operation of the elevator. As one set of fingers 23 pass over the top of the elevator they strike the wall 41 at the rear end of the transverse conveyer. The continued travel of the elevator draws this set of fingers rearwardly on account of the chain passing over the inset sprocket-wheel 21, as illustrated in Fig. 5, thus scraping the shocks from the fingers. The cords 24 hold the fingers from being turned downwardly by the weight of the shock, while at the same time the inset position of the sprocket 21 allows slackening of the cord passing under the



upper end of the conveyer to allow the fingers to swing when being carried over the wall 41.

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

1. In a shock-loader of the class described, the combination with a frame supported upon wheels, of an elevator having pivotal support in said frame, sprockets supported in the ends of said elevator, endless chains running over said sprockets, gathering-fingers carried by said chains, cords connecting said fingers, and inset sprockets for said chains so arranged as to carry the chain inward after passing over the sprockets at the upper ends of the elevator.

2. In a shock-loader of the class described, the combination with a frame supported upon wheels, of an elevator having pivotal support in said frame, means for turning said elevator upon said support, sprockets journaled in the ends of said elevator, chains running over said sprockets, gathering-fingers carried by said chains, inset sprockets for said chains below the upper end of said elevator, said inset sprockets being so arranged

as to carry the chains inward after passing over the adjacent sprockets in the upper end of the elevator, and cords connecting alternate fingers, said cords being each connected at one end with the base of one finger, and at its opposite end with the alternate finger.

3. In a shock-loader of the class described, the combination with a frame supported upon wheels, of an elevator having pivotal support in said frame, sprockets journaled in the ends of said elevator, a sprocket arranged within said elevator intermediate of said end sprockets, endless chains running over said sprockets and underneath said intermediate sprocket, gathering-fingers carried by said chains, cords connecting said fingers, and a transverse wall 41 arranged at the rear of said elevator in position to be engaged by said fingers as the fingers pass over the upper end of the elevator.

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

EEMEL LUMATTA.

Witnesses:

F. L. WALKER,

J. L. BOHN.