

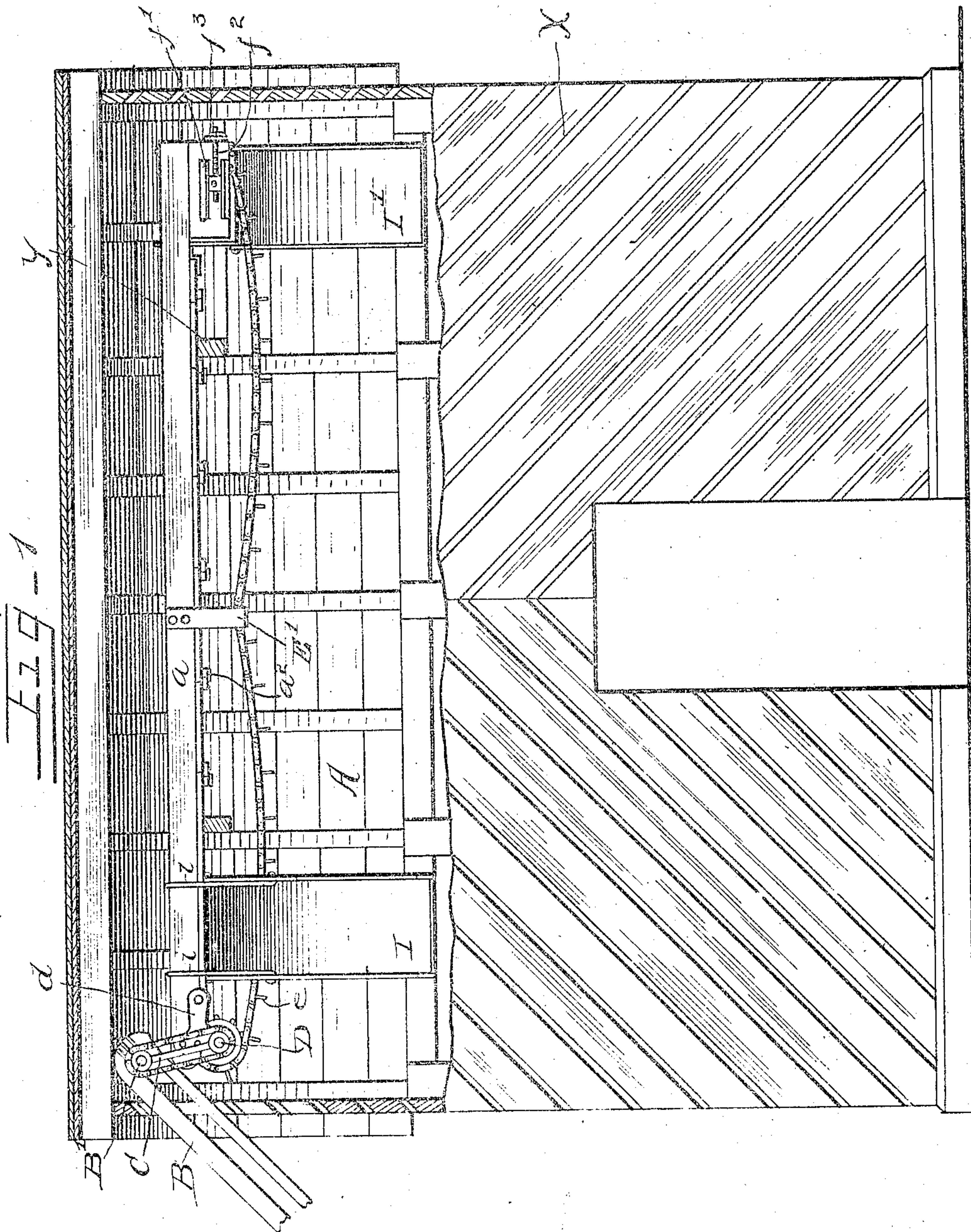
No. 822,412.

PATENTED JUNE 5, 1906.

G. WENZELMANN & E. H. OVERHOLT.  
PORTABLE DISTRIBUTING CONVEYER.

APPLICATION FILED FEB. 4, 1906.

4 SHEETS—SHEET 1.



WITNESSES

J. W. Angell.  
W. W. Withenbury

INVENTORS

Gustav Wenzelmann  
Edward H. Overholt

by Charles E. Hill, ATT. Y.



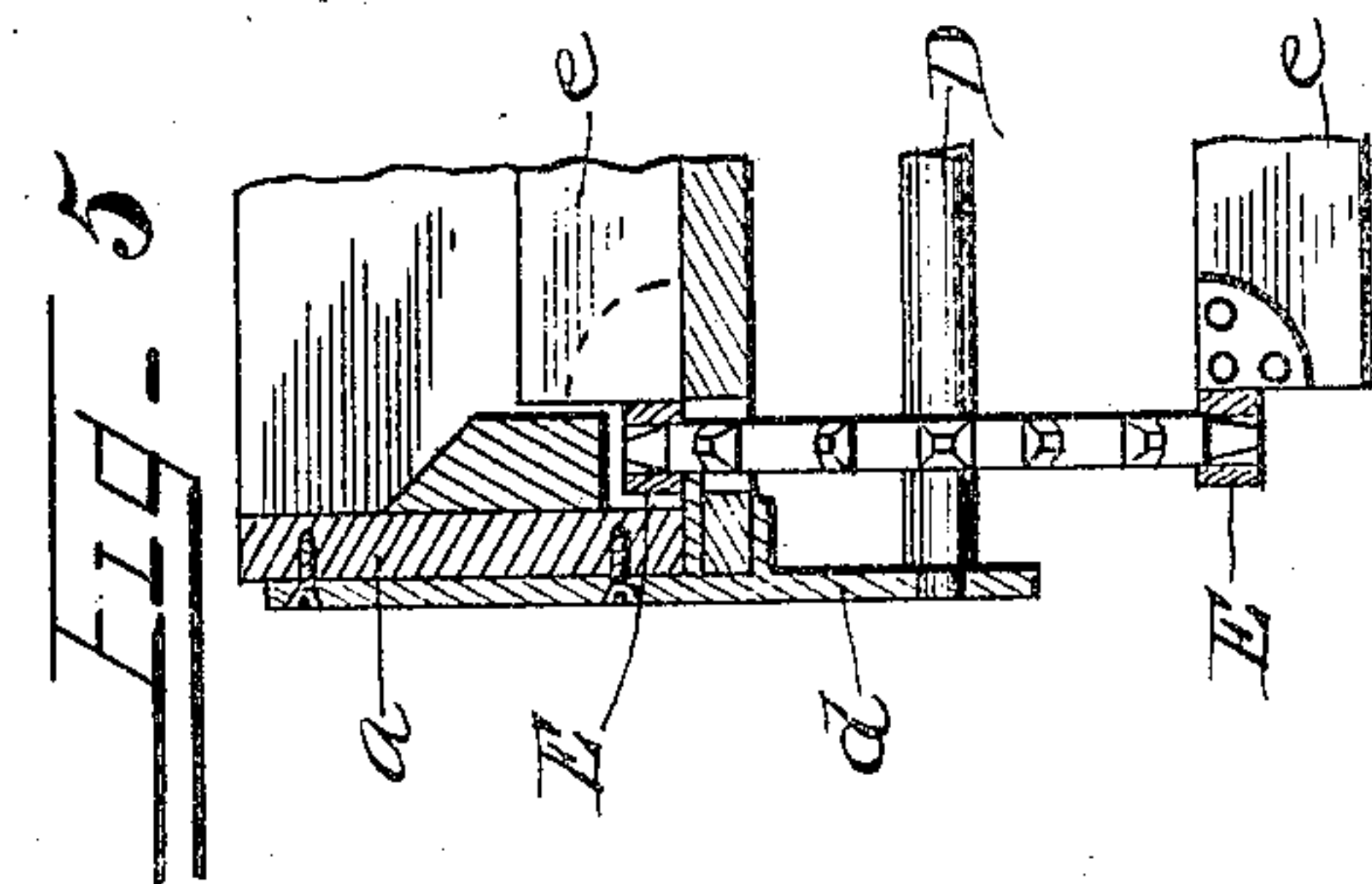
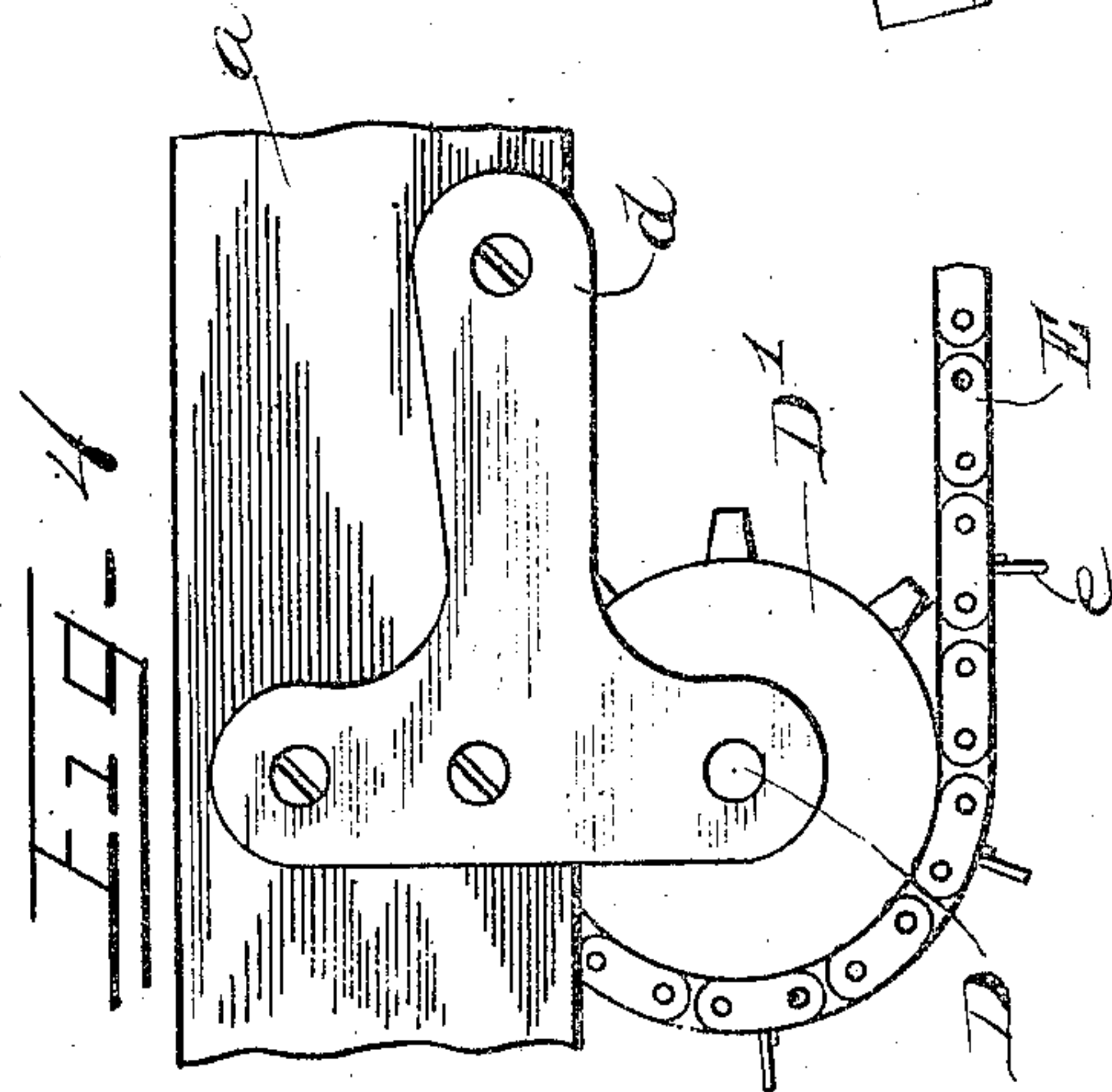
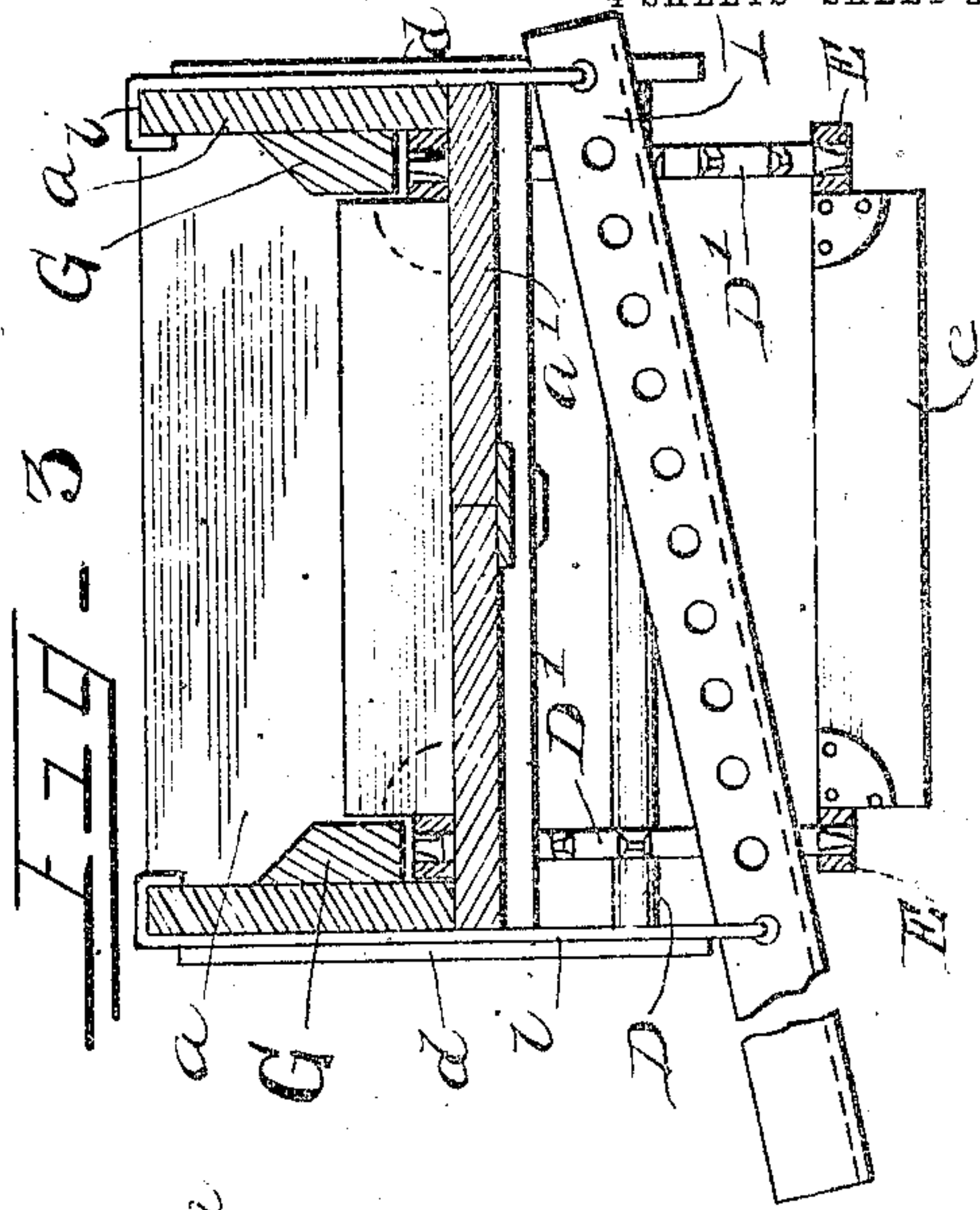
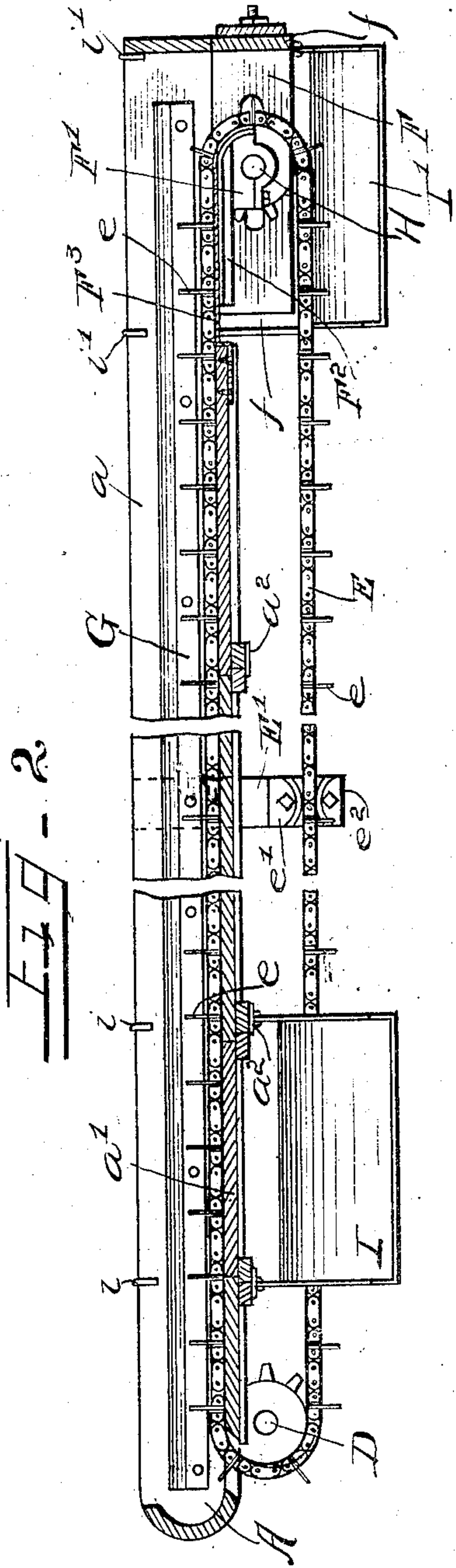
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4 SHEETS—SHEET 2.



Witnesses

J. W. Angell.  
W. W. Withenbury

INVENTORS  
Gustav Wenzelmann  
Edward H. Overholt.

by *Charles H. Wells* Att'y.

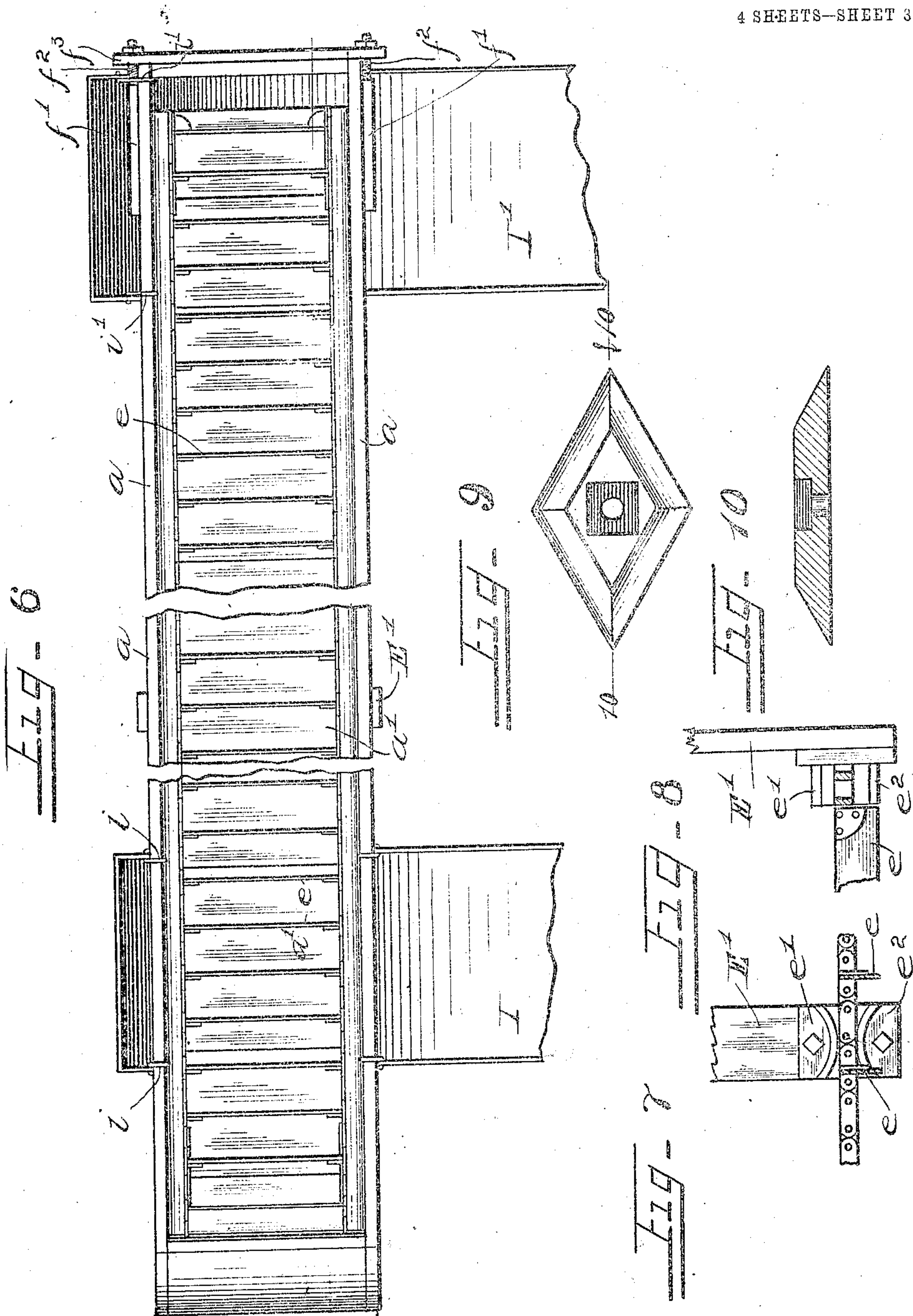
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4 SHEETS—SHEET 3.



Witnesses

J. W. Angell  
W. W. Withenbury

Inventors

Gustav Wenzelmann  
Edward H. Overholt

by Charles W. Mills, Atty.



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4 SHEETS—SHEET 4.

Fig-11

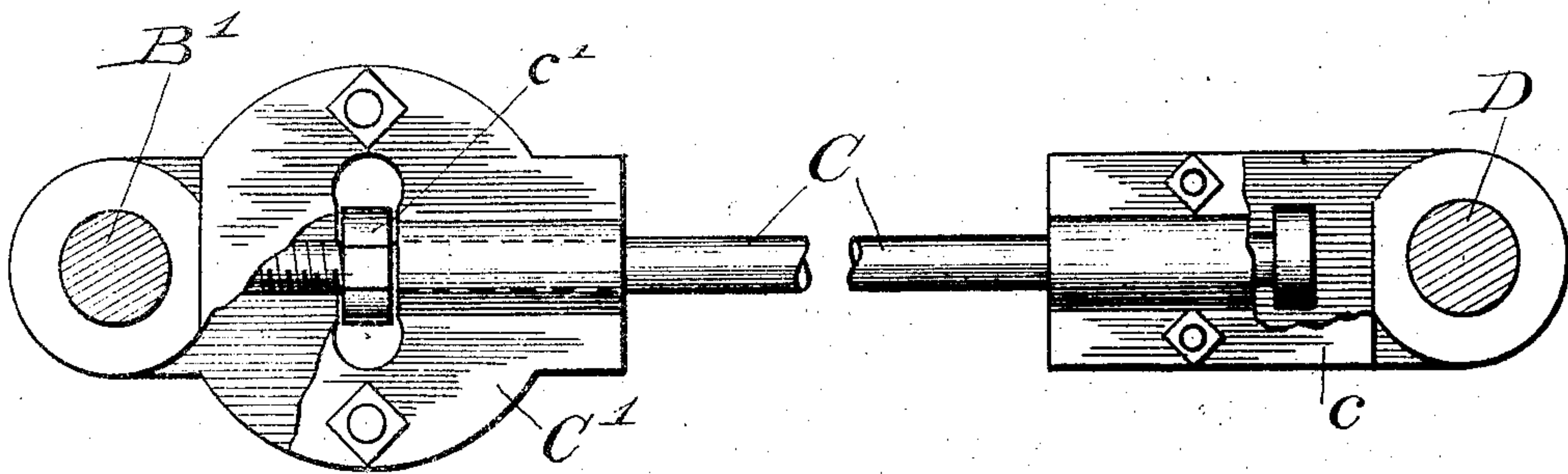


Fig-12

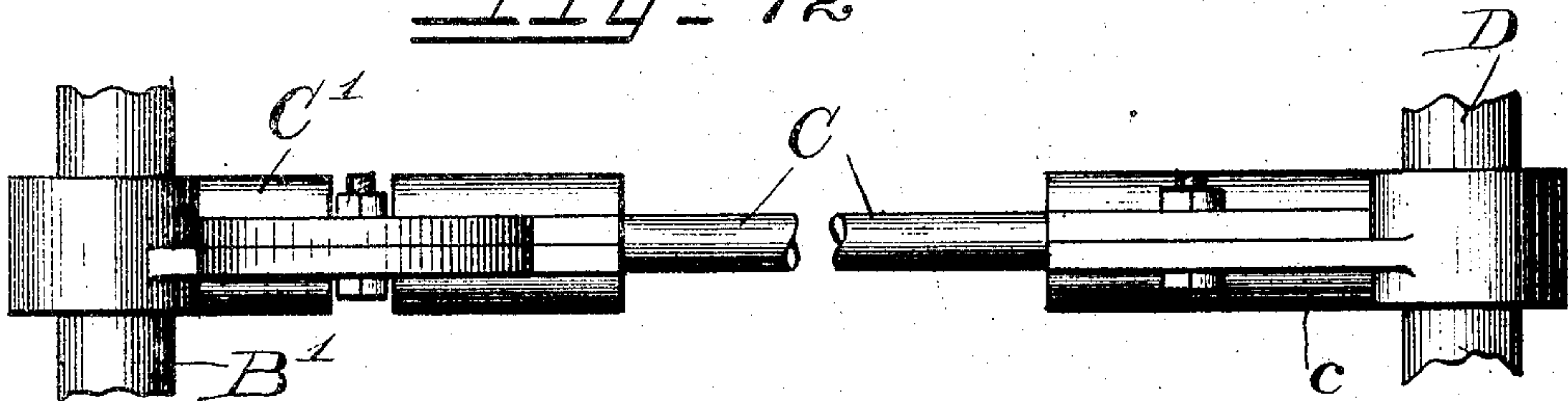


Fig-13

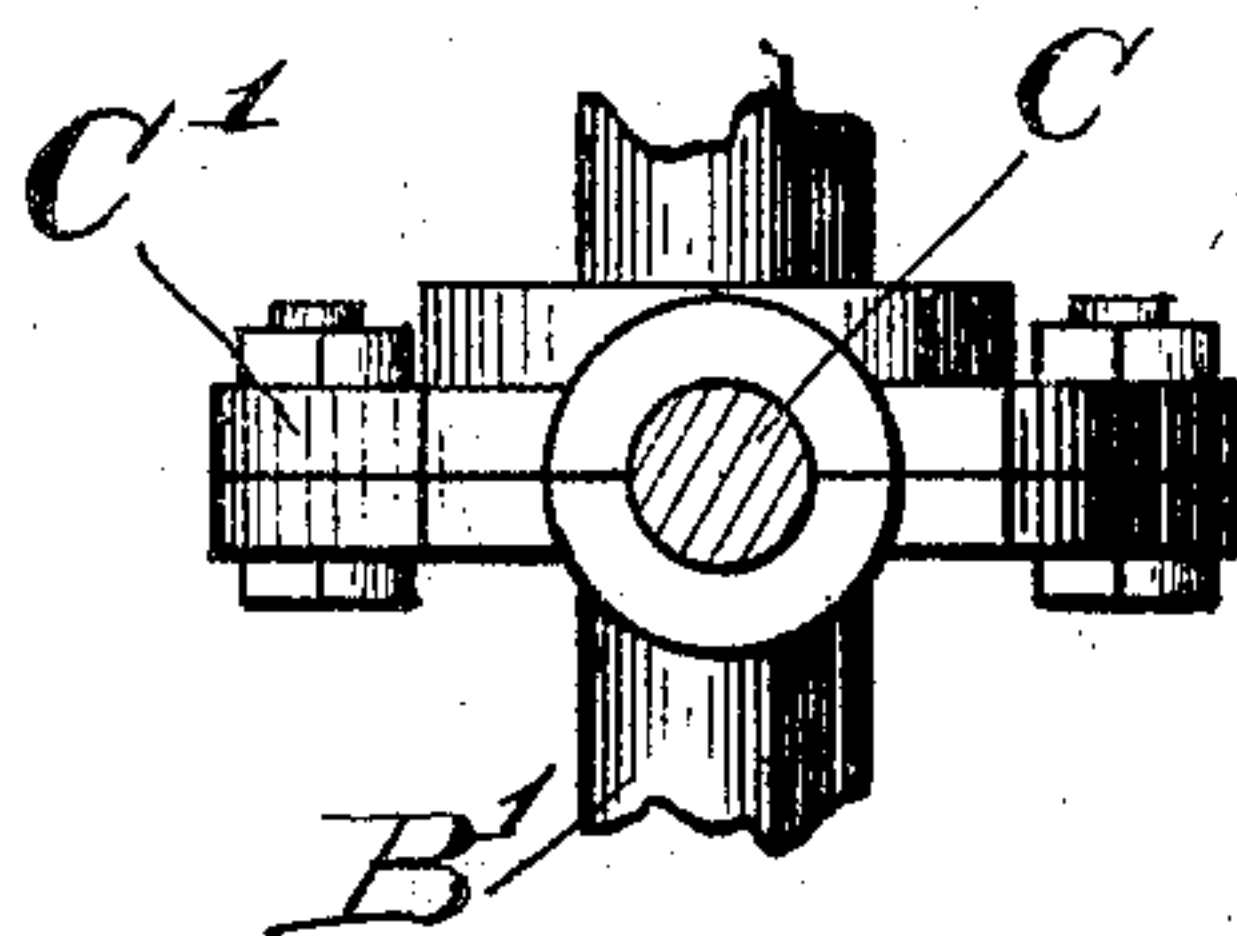


Fig-14

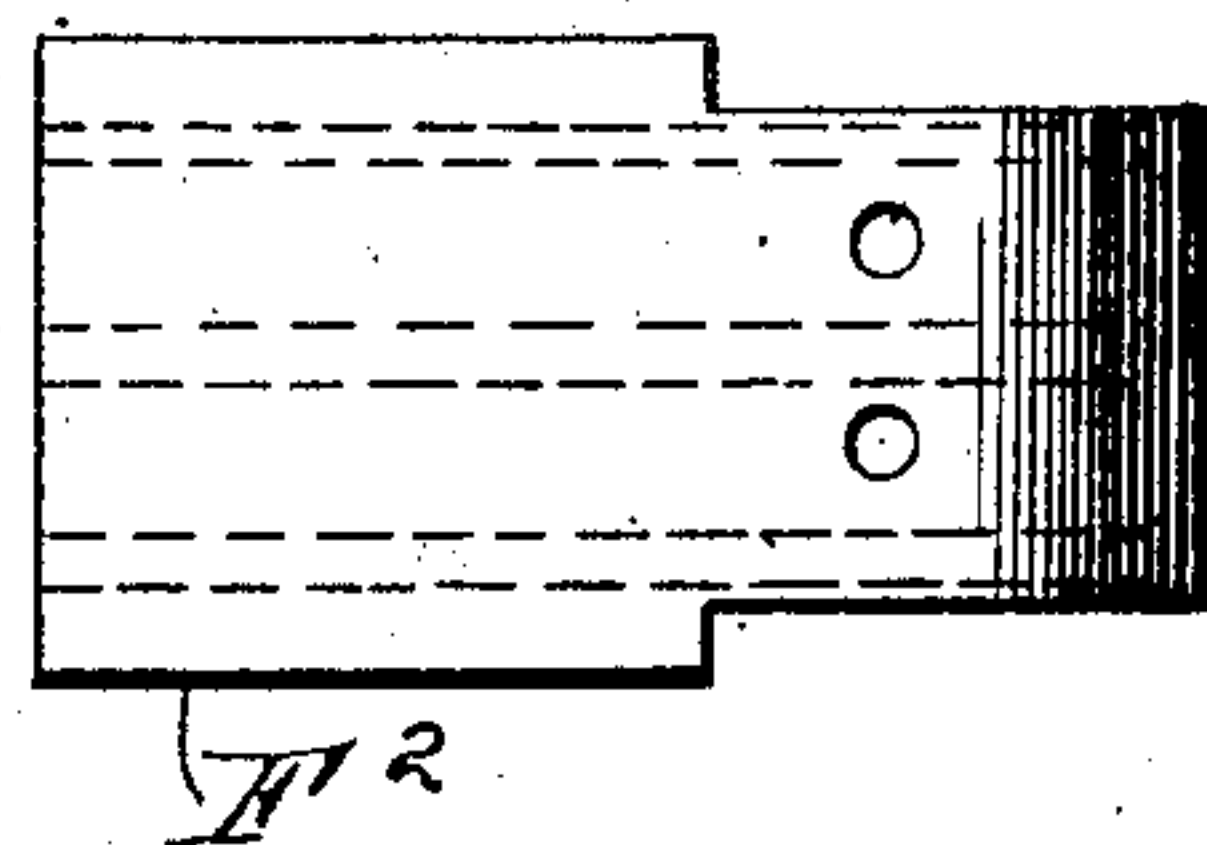
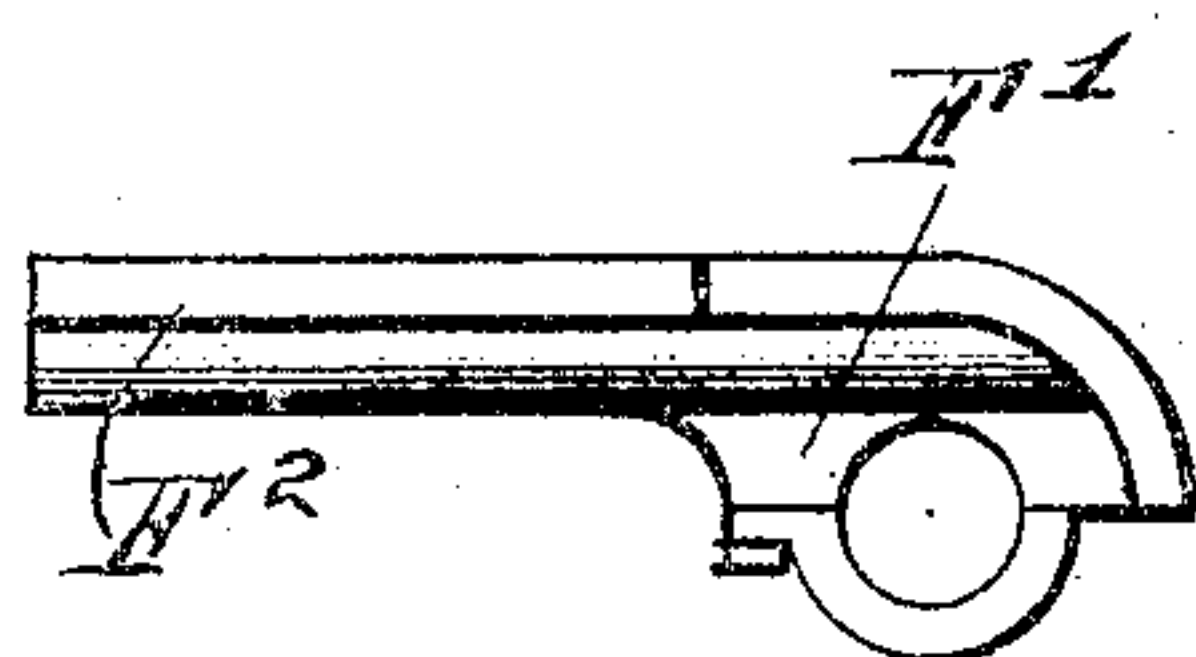


Fig-15



Witnesses

J. W. Angell  
W. W. Withenbury

INVENTORS  
Gustav Wenzelmann  
Edward H. Overholt.

by *Charles H. ...* Att.-



# UNITED STATES PATENT OFFICE.

GUSTAV WENZELMANN AND EDWARD H. OVERHOLT, OF GALESBURG,  
ILLINOIS, ASSIGNORS TO THE WENZELMANN MANUFACTURING COM-  
PANY, A CORPORATION OF ILLINOIS.

## PORTABLE DISTRIBUTING-CONVEYER.

No. 822,412.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed February 4, 1905. Serial No. 244,123.

*To all whom it may concern:*

Be it known that we, GUSTAV WENZELMANN and EDWARD H. OVERHOLT, citizens of the United States, and residents of the city of Galesburg, in the county of Knox and State of Illinois, have invented certain new and useful Improvements in Portable Distributing-Conveyers; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to distributing-conveyers, and more particularly to a portable distributing-conveyer adapted for use in connection with a grain-elevator to distribute the grain throughout the storage-bin, granary, or other receptacle therefor into which the grain is being deposited, though obviously it is equally adaptable for many other purposes.

Heretofore devices of this kind have been more or less cumbersome and complicated, necessitating a great deal of care and labor in installing the same, and have not been provided with adequate means for quickly attaching them to the elevator.

The object of this invention is to provide a very cheap and simple device which may be installed or removed with a minimum amount of labor and capable of being quickly adjusted with respect to the elevator.

The invention consists in the matters hereinafter described, and more fully pointed out and defined in the appended claims.

In the drawings, Figure 1 is a fragmentary side elevation illustrating a device embodying our invention. Fig. 2 is an enlarged fragmentary longitudinal section of the same. Fig. 3 is an enlarged transverse section thereof. Fig. 4 is an enlarged detail of the bearing for the sprocket-shaft at the receiving end of the conveyer. Fig. 5 is a fragmentary transverse section of the same, illustrating details of construction to prevent corn or the like wedging the chain. Fig. 6 is a fragmentary top plan view of the distributing-conveyer. Fig. 7 is an enlarged detail of the guides for the lower run of the chain of the conveyer. Fig. 8 is a view taken at right angles with that shown in Fig. 7. Fig. 9 is a plan view of one of the buttons for the conveyer-bot-

tom. Fig. 10 is a section taken on line 10 10 of Fig. 9. Fig. 11 is a fragmentary face view of the extensible rods connecting the distributing-conveyer with the elevator. Fig. 12 is a side elevation of the same. Fig. 13 is a transverse section thereof. Fig. 14 is a top plan view of the guide at the delivery end of the conveyer. Fig. 15 is a side elevation of the same.

As shown in said drawings, the conveyer extends longitudinally of the crib or granary X and may conveniently be supported therein in any desired manner, but, as shown, rests upon a support Y, carried on the rafters of the granary. Said conveyer comprises a trough or box A, having parallel side walls *a*, of sheet metal, wood, or any suitable material, beneath which is secured a sectional bottom comprising a plurality of transverse sections *a'*, fitted closely together and held in place by buttons *a''*, but any or all of which may be removed when desired by turning the appropriate button. The forward end of said conveyer is supported on the upper end of the elevator B, of any preferred construction, by means of the adjusting-rods C, each of which is provided at one end with a head which engages in the hanger *c*, transversely apertured at its outer end to receive the sprocket-shaft D at the forward end of the conveyer. The other end of said rod is threaded and fits loosely in a cylindric seat in the hanger C', which, as shown, is also apertured at the end to receive the sprocket-shaft B', journaled in the upper end on the elevator B, and is provided with a transverse slot to receive a nut *c'*, which engages said threaded end of said adjusting-rod. For convenience said hangers are made in two parts to facilitate construction and the insertion of the adjusting-rod, and the parts are rigidly bolted together, as shown in Figs. 11 to 13.

For the purpose of moving the grain or other material longitudinally of the trough or box A parallel sprocket-chains E are provided, which are transversely connected by means of lags *e*. The upper run of said chain moves in said box or trough, and the lower run thereof is supported, as shown, from depending brackets E', supported on the side walls *a*, and on the inner faces of which are provided the upper and lower bear-



ing-blocks  $e'$   $e''$ , the adjacent faces of which are rounded, as shown in Fig. 7, and between which the chain passes. Said bearing-blocks however, are sufficiently thin to avoid engagement with the ends of the lags  $e$  and serve only to support said lower run of the chain. At the driving end of said conveyer, or that adjacent the point of support on the elevator B, on the outer sides thereof, brackets  $d$  are provided, in which is journaled said sprocket-shaft D, which drives the conveyer-chain. Said brackets, as shown, each comprise a longitudinal T-shaped blank of metal rigidly secured on the side of the trough and having one arm extending below the same. The shaft is journaled in said downwardly-extending arm, thus affording a strong construction, while bringing the supporting-sprocket D' below the top of the trough. At the opposite end of said conveyer, plates F extend downwardly beneath the side walls  $a$  of the trough and in the plane thereof and are connected at their ends by cross-pieces  $f$ , and on the outer side of said plates parallel guides  $f'$  are secured, between which and extending through suitable slots in said plates are the bearings F' for the sprocket-shaft H at the rear end of the conveyer. A threaded bolt  $f^2$  engages each of said bearing-blocks between said guides and passes at its other end through a suitable strap  $f^3$ , extending transversely of the trough. Nuts are provided on each of said bolts on the outer side of said straps, whereby said bearings F' may be drawn outwardly to secure the desired strain upon the chain E. At the rear end of the distributing-conveyer and supported upon the journal for the sprocket-shaft is a guide F<sup>2</sup>, which comprises, as shown, a broad flat upper surface over which the conveyer-chains slide and a downturned extremity corresponding in curvature with the path of the conveyer-chain, so that all material received thereon, should it not be dumped previously, will be delivered from the conveyer at the end thereof, as shown in Fig. 2. As shown, a plate of sheet metal F<sup>3</sup> extends from the last of the bottom sections over said guide and is secured thereto by any desired means.

Preferably a longitudinal cleat G is rigidly secured to each side wall  $a$  inside the trough, extending downwardly between the same and the ends of the lags  $e$  into close proximity with the chain, as shown in Figs. 2 and 3, and prevents corn or other material lodging between said lags and the side walls of the trough.

Adjustable means are shown for delivering the material from the distributing-conveyer to any point within the bin or granary. As shown, sliding spouts or chutes I I' extend transversely of the trough and are secured beneath the same by means of the rods  $i$   $i'$ , adjustably attached to said spouts and which engage over the walls of the distributing-con-

veyer. Obviously said spouts may be slid along the conveyer to any desired point, and the desired bottom section may be removed from the conveyer, allowing the material to dump therein, when it will flow to either side of the bin or granary, as preferred, according to the adjustment of the spout. It is thus possible to deliver material by means of this invention over the entire area of the bin, filling the same uniformly to its utmost capacity.

The operation is as follows: Inasmuch as the receiving end of the distributing-conveyer is adjusted upon the end of the elevator, it is obvious that when said elevator is adjusted as to height it will also adjust said distributing-conveyer, which may also be adjusted independently thereof by means of the rods C. The construction of the chain-tightening device is exceedingly simple and effective, affording perfect and quick adjustment of the chain, and by means of the removable bottom sections of the trough said trough may be opened at any point along its length and one of the sliding spouts or chutes I or I' placed beneath the opening, which will deliver the corn or other material at any desired point in the bin.

While we have shown our invention as used as a grain-distributor, it is obvious that it may be used for many other purposes, and many details of construction may be varied without departing from the principles of this invention.

We claim as our invention—

1. In a device of the class described the combination with a trough having removable bottom sections of a sprocket-shaft journaled at each end thereof, slidable bearings for one of said shafts, a transverse bar across the end of said trough adjacent said bearings, adjusting-bolts engaged therein and in said bearings, a chain conveyer in said trough, a strip on each side of the trough adapted to overlap the edges of the conveyer and the delivery-spout suspended on said trough and adjustable both longitudinally and transversely thereof.

2. In a device of the class described the combination with a trough having removable bottom sections of sprocket-shafts journaled thereon, sprocket-wheels on said shafts, sprocket-chains carried on said wheels, transverse lags thereon, guides having convex faces adapted to support the lower lap of the chain intermediate the ends of the trough, a delivery-spout adjustable longitudinally of the trough and supporting-hooks for said trough adjustably engaged thereto.

3. In a conveyer of the class described the combination with a trough having removable bottom sections of a conveyer movable longitudinally thereof, a delivery-spout provided at its upper end with a plurality of apertures in the side walls thereof and hangers adapted to engage in said apertures and over the sides



in the trough to permit the movement of the spout both longitudinally and transversely of the trough.

4. In a machine of the class described a distributing-conveyer comprising sides and a sectional movable bottom, sprocket-shafts at each end of and journaled below the same, conveyer-chains thereon, the upper lap movable over the bottom of the trough, cleats on each side wall extending over and in close proximity with the chains, means for tightening said chains, laterally-directed slidable chutes supported on the trough and acting to direct the grain or the like laterally, convex supports adapted to support the lower run of the chain and extensible adjusting-rods pivoted on the ends of the sprocket-shaft at the receiving end of the conveyer and adapted for pivotal engagement at the other ends with a driving sprocket-shaft and acting to support the end of the conveyer and to adjust the tension of the driving-chain.

5. In a device of the class described the combination with a trough having removable bottom sections of adjustable hangers at the forward end of said trough comprising a head

rotative thereon, a two-part head at the opposite end, means thereon adapted to adjust the hangers as to length and an adjustable spout carried on said trough and adapted to dump laterally of the same.

6. In a machine of the class described the combination with a trough having removable bottom sections therein, of a sprocket-shaft journaled at each end thereof, an endless conveyer driven by said shafts and adapted to convey material through said trough, a head journaled at each end of the forward shaft, a rod engaged in each head, a slotted head movably engaged on the outer end of each rod and a nut in each slot having threaded engagement with the rod and adapted to adjust the forward end of the conveyer as to height.

In testimony whereof we have hereunto subscribed our names in the presence of two subscribing witnesses.

GUSTAV WENZELMANN.  
EDWARD H. OVERHOLT.

Witnesses:

JENNIE DAVIS,  
ALVAH S. GREEN