No. 759,884. PATENTED MAY 17, 1904.

S. B. HART.

CONVEYER.

APPLICATION FILED MAY 2, 1903.

NO MODEL. 3 SHEETS—SHEET 1.

Fig. 2.

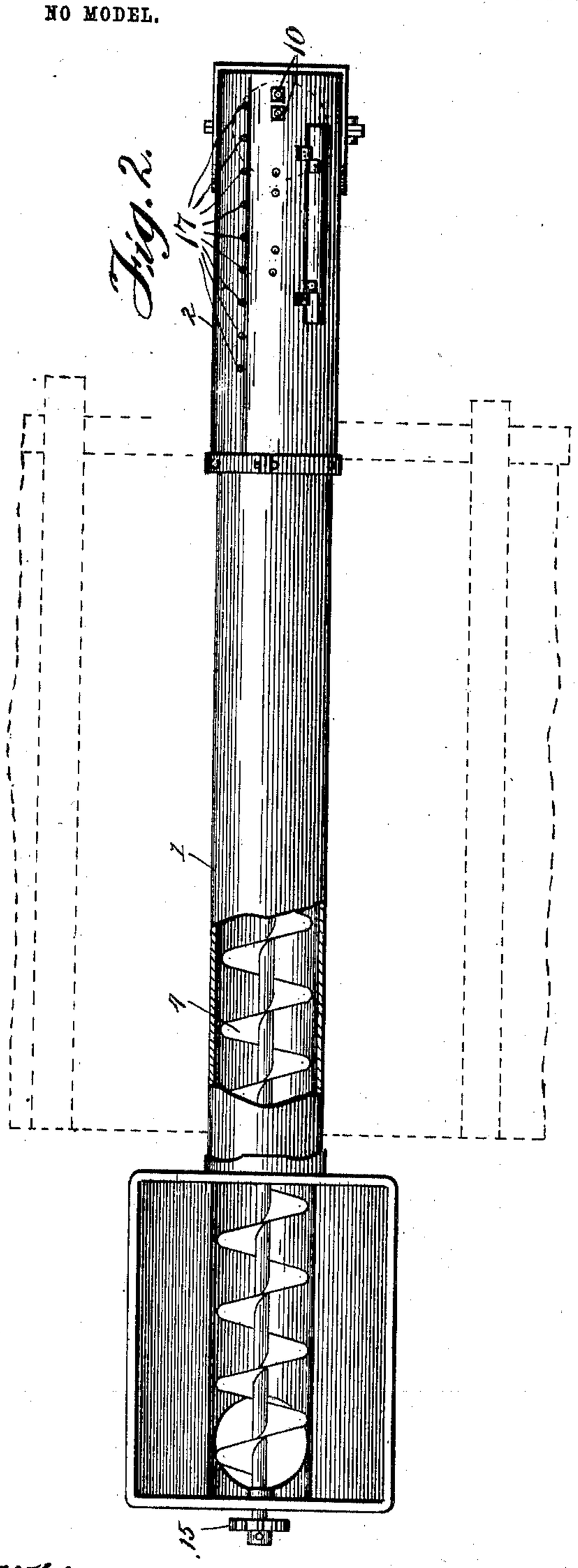
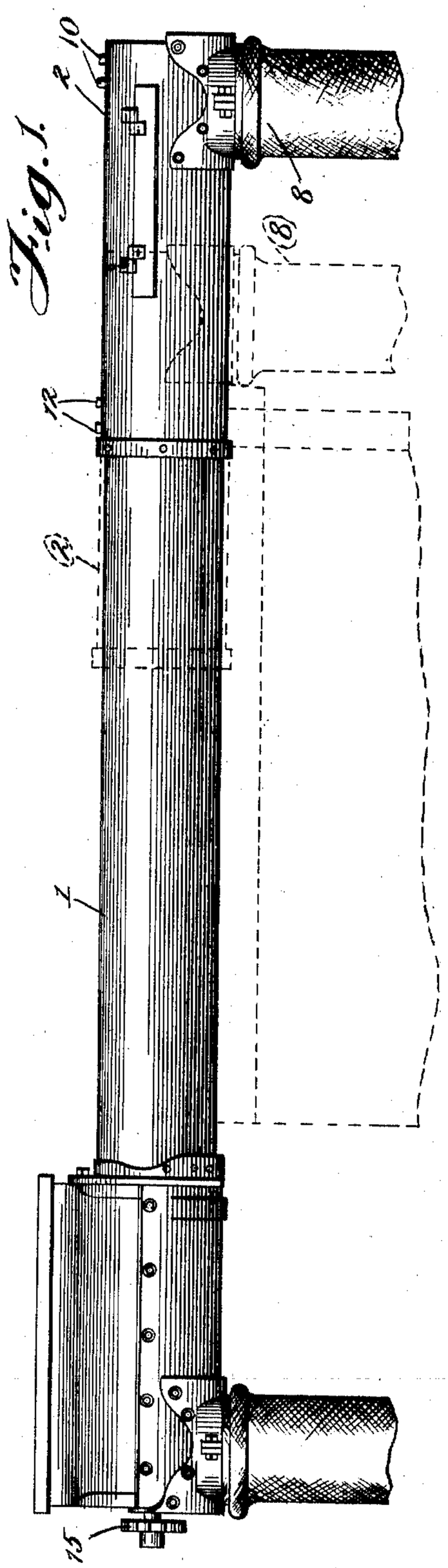


Fig. 1.



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NO MODEL. 3 SHEETS—SHEET 2.

Fig. 3.

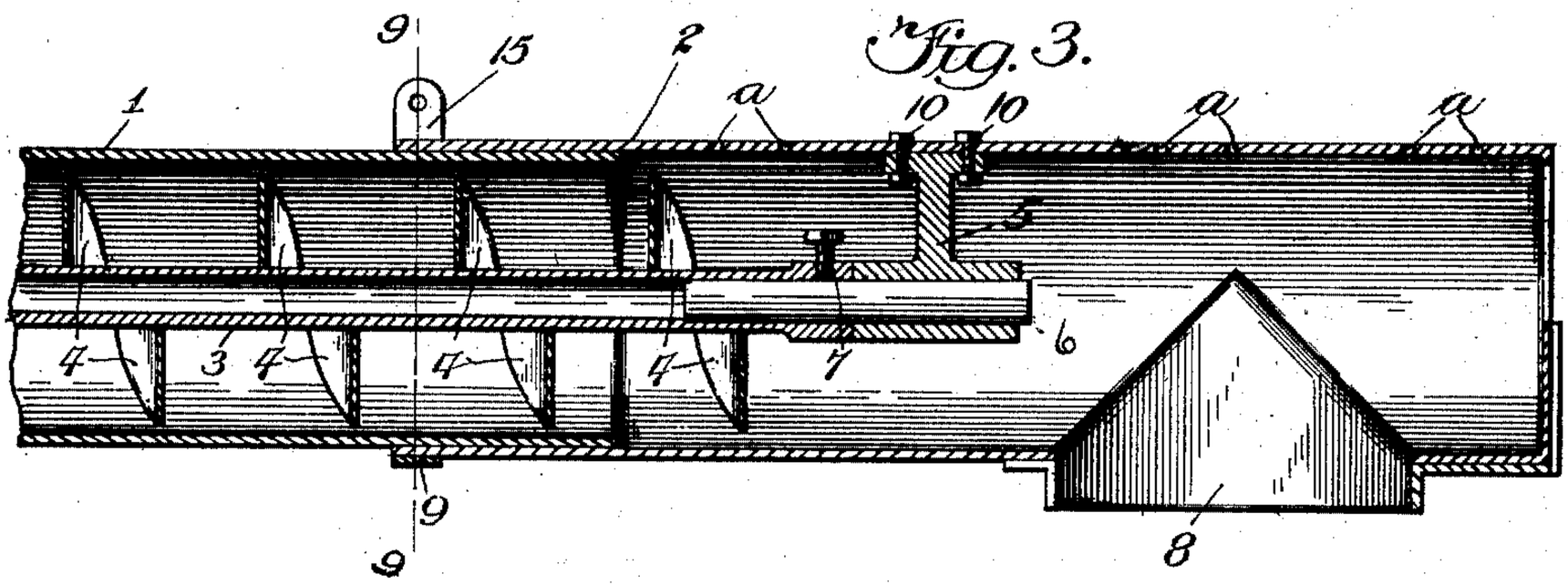


Fig. 4.

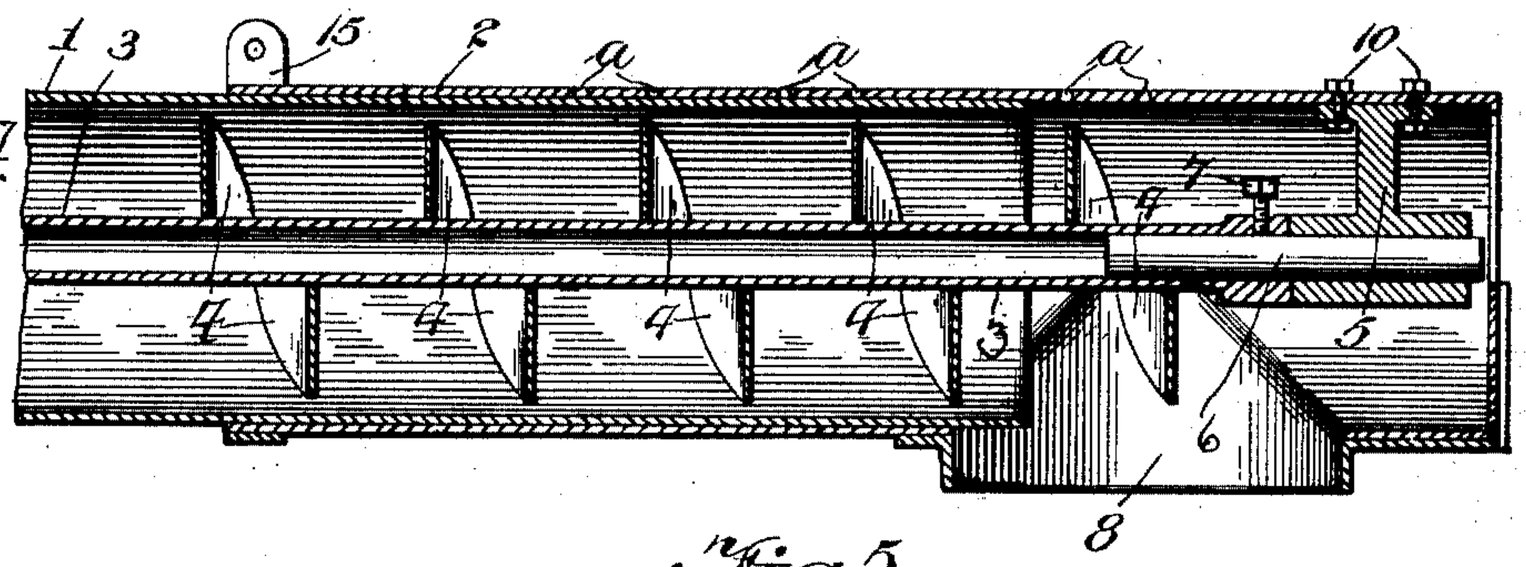


Fig. 5.

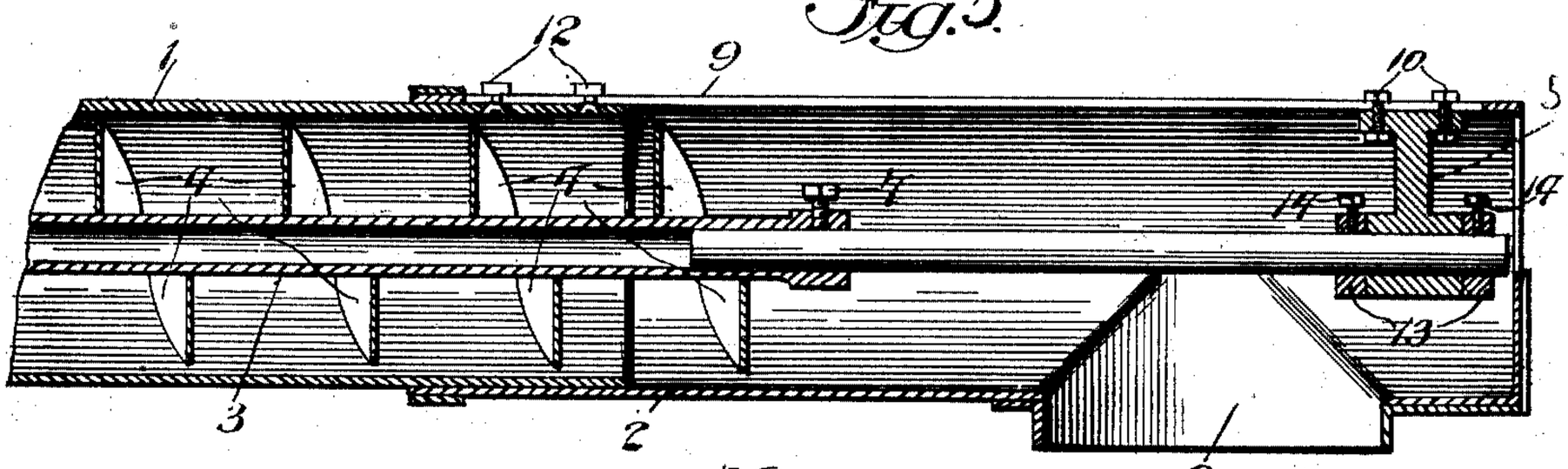
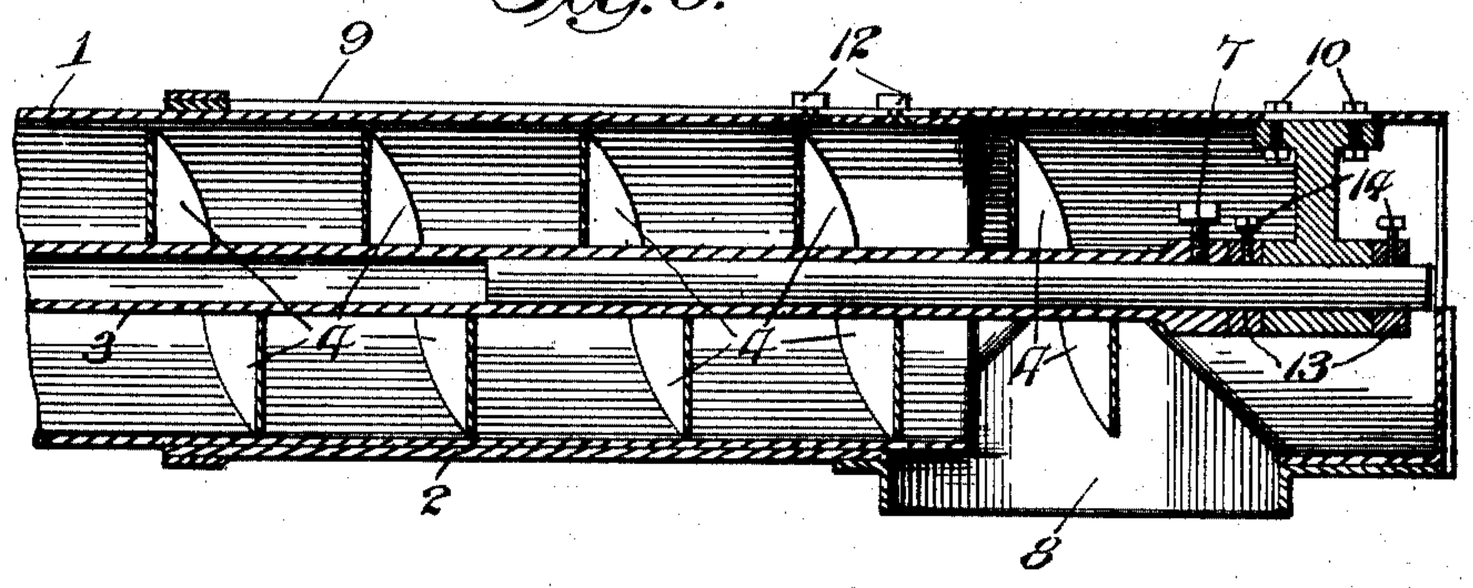


Fig. 6.



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CONVEYER.

APPLICATION FILED MAY 2, 1903.

NO MODEL. 3 SHEETS—SHEET 3.

Fig. 7.

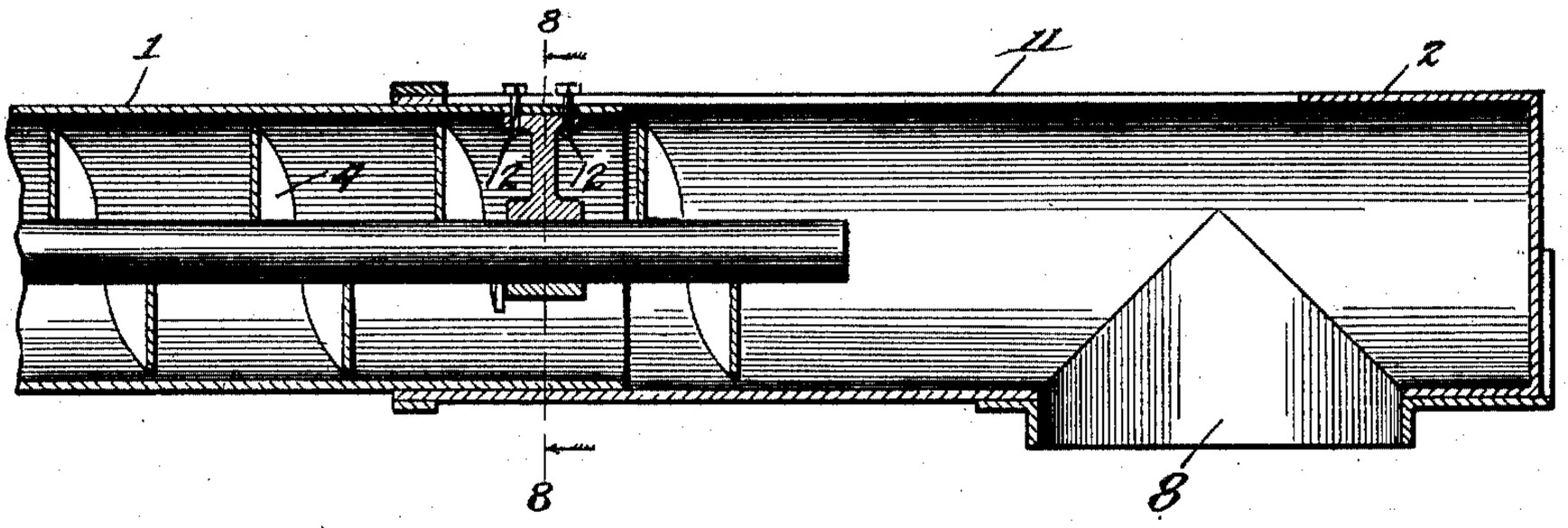


Fig. 8.

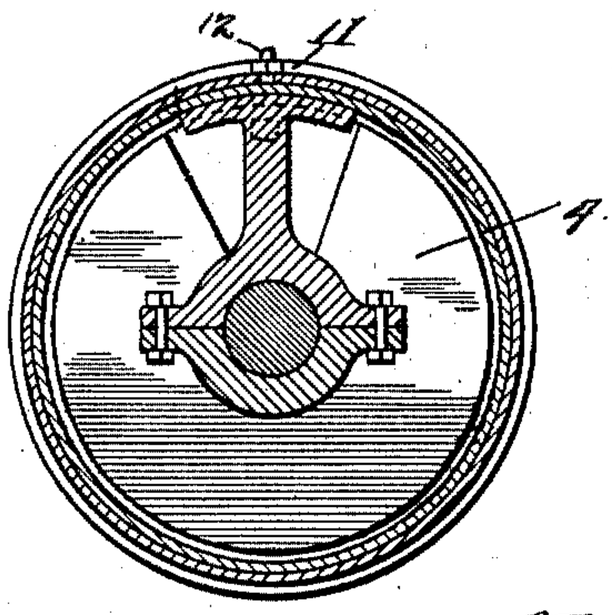
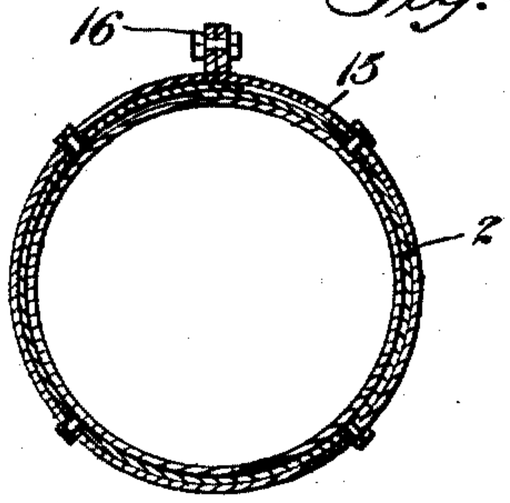


Fig. 9.



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No. 759,884. Patented May 17, 1904.

UNITED STATES PATENT OFFICE.

STACY B. HART, OF PEORIA, ILLINOIS, ASSIGNOR TO THE HART GRAIN WEIGHER COMPANY, OF PEORIA, ILLINOIS, A CORPORATION OF ILLINOIS.

CONVEYER.

SPECIFICATION forming part of Letters Patent No. 759,884, dated May 17, 1904.

Application filed May 2, 1903. Serial No. 155,302. (No model.)

To all whom it may concern:

Be it known that I, STACY B. HART, a citizen of the United States of America, residing at Peoria, county of Peoria, and State of Illinois, have invented certain new and useful Improvements in Conveyers, of which the following is a description.

My invention belongs to that class of conveyers in general use for transferring grain from one point to another and in which for some reason it may be necessary to adjust the length of the conveyer to adapt the same to particular uses. Its object is to produce a simple and effective device for the purpose stated; and to this end it consists in the novel construction, arrangement, and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts, Figure 1 indicates a side elevation of my improvement. Fig. 2 shows a top plan of a slight modification of the same with parts broken away. Fig. 3 is a longitudinal section of one form of my improvement, showing the parts in an extended position. Fig. 4 is a similar view showing the same construction when adjusted to decrease the length of the conveyer. Fig. 5 shows a similar view of a slightly-modified form. Fig. 6 is a similar view to Fig. 4, showing an adjusted position of the form shown in Fig. 5. Fig. 7 is a similar view showing another modification. Fig. 8 is a transverse section in line 8 8 of Fig. 7, and Fig. 9 is a section of the inclosing tubes in line 9 9 of Fig. 3.

In the preferred form shown in the drawings my invention is shown as applied to the class of conveyers known as "cross-conveyers" for threshing-machines and similar devices.

As shown in the drawings, Figs. 3 and 4, 1 is the main tube of a conveyer of the class described provided with a telescoping section 2, adapted to slide upon the first section to regulate the length of the entire tube. 3 is a shaft arranged in the tube carrying the usual worm 4. 5 is a bearing secured to the extension 2 for the shaft extension 6, the other end of which is positioned within the hollow shaft 3, as shown. A set-screw 7 or equivalent means may be employed to firmly secure the parts in operative position when once adjusted as desired. The bearing 5 may be secured to the section 2 by bolts 10 10, passing through suitable holes *a a* for the purpose, a plurality of pairs of such holes being provided to allow the adjustment of the section, as described. An equivalent slot 11 may be provided for the same purpose, as shown in Fig. 7. As thus shown and described, the conveyer may be adjusted to a length in which the parts are in the relative positions shown in Fig. 4, in which the worm 4 extends over the discharge-pipe 8, formed in the extension 2, or the tube may be extended substantially in a position shown in Fig. 3, in which case the worm in its operation will deliver the grain near the extension or discharge 8 and by forcing the grain forward in the same will push it on until it is suitably discharged.

As shown in Figs. 5 and 6, the bearing 5 may be relatively adjusted in the extension 2 without materially altering the position or length of the tube. In this form a longitudinal slot 9 is formed in the extension, bolts 10 10, extending therethrough, serving to securely fasten the bearing 5 in position. By simply loosening the bolts 10 10 the extension 2 may be moved upon the tube 1 without otherwise adjusting the shaft 6 in the hollow shaft 3, the other end of the shaft 6 extending through the end of the tube. Collar 13 13 may be employed, if desired, set-screws 14 14 securing them to the shaft, thus aiding in maintaining the parts in proper relative position.

As shown in Fig. 7, the bearing 5 is permanently secured to the section 1, the worm 4 being separated at that point to permit a suitable connection of the shaft with the bearing. As here shown, it is simply necessary to adjust the position of the section 2 upon the section 1 without otherwise interfering with the connection of any of the other parts. Any suitable means may be employed to secure the two sections in proper adjusted position.

As shown, a slot 11 is formed in the extension 2, and the bolts 10, securing the bearing to the section 1 and extending through said slot, tend to firmly lock the parts in the desired position.

The same or equivalent means may be adopted for securing the two sections together in any of the forms shown in the drawings. If preferred, however, other suitable means may be employed to secure the sections together. As shown in Figs. 3, 4, and 9, the end of section 2 is provided with a clamping-band 15, which by means of a bolt 16 may be clamped to section 1, as indicated. The end of section 2 is constructed to afford sufficient play for this purpose. As shown in Fig. 2, the rivets 17, securing the edges of section 2 together, extend clear to the end of the section, thus allowing the edges to loosely overlap at the end for the purpose stated.

Having thus described my improvement, it is obvious that various immaterial modifications may be made without departing from the spirit of my invention. Hence I do not wish to be understood as limiting myself to the exact form and construction shown.

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

1. In a device of the kind described, the main conveyer-tube provided with a shaft positioned therein carrying a conveyer-worm, and means for rotating the shaft, in combination with a section of the tube relatively movable with relation to the main tube to regulate the length of the conveyer-tube, and means for securing the parts in their adjusted positions.

2. In a device of the kind described, a conveyer-tube having a hollow shaft supported therein carrying the wings of a conveyer, and means for rotating the shaft, in combination with a telescoping section constructed to move upon the first section to adjust the length of the tube, and carrying a shaft 6 adapted to slide within the hollow shaft, and means for securing the various parts in operative position.

3. In a device of the kind described, a conveyer-tube, comprising two parts constructed to telescope upon one another to regulate the length of the tube, one of which parts is provided with a longitudinal slot, and the other with one or more bolts positioned within the slot, adapted to secure the parts together in their adjusted positions, in combination with a conveyer supported within the tube, and means for operating the same, substantially as described.

4. In a device of the kind described, a conveyer-tube, comprising two parts constructed to telescope upon one another to regulate the length of the tube, the outer section being provided with a clamping-band adapted to secure the two parts together in their adjusted position, in combination with a conveyer supported within the tube, and means for operating the same, substantially as described.

5. In a device of the kind described, a conveyer-tube comprising two parts constructed to telescope upon one another to regulate the length of the tube, the outer section being provided with a clamping-band adapted to secure the two parts together in their adjusted position, in combination with a conveyer supported wholly within one section of the tube, and means for operating the same, substantially as described.

6. In a device of the kind described, a conveyer-tube, comprising two parts constructed to telescope upon one another to regulate the total length of the tube and means for securing the parts in their adjusted positions, in combination with a conveyer the supports of one end of which are wholly within one section of the tube, and means for operating the same, substantially as described.

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

STACY B. HART.

Witnesses:
JOHN W. HILL,
CHARLES I. COBB.