

(No Model.)

J. NELSON.
GRAIN CONVEYER.

No. 349,233.

Patented Sept. 14, 1886.

FIG. 1.

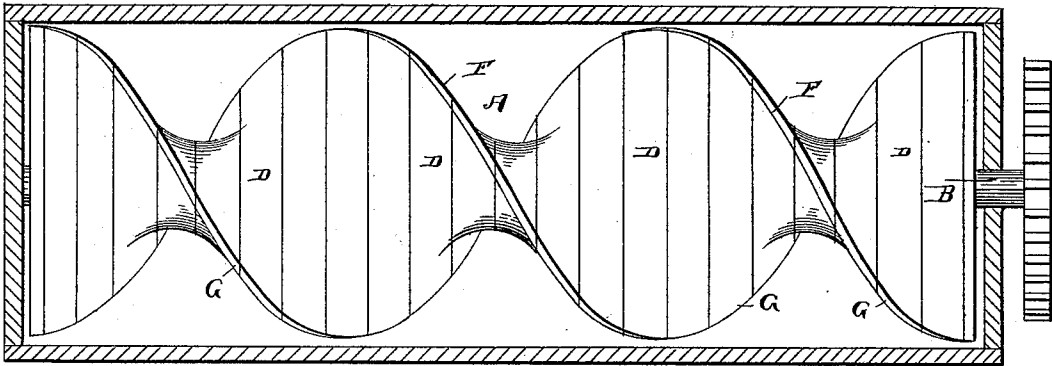


FIG. 2.

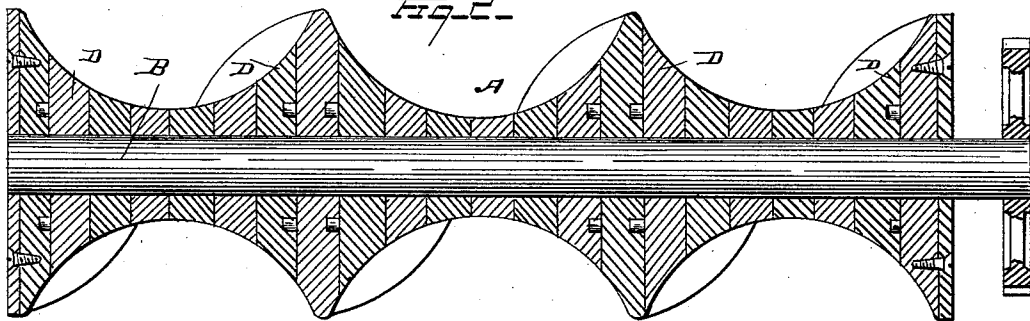
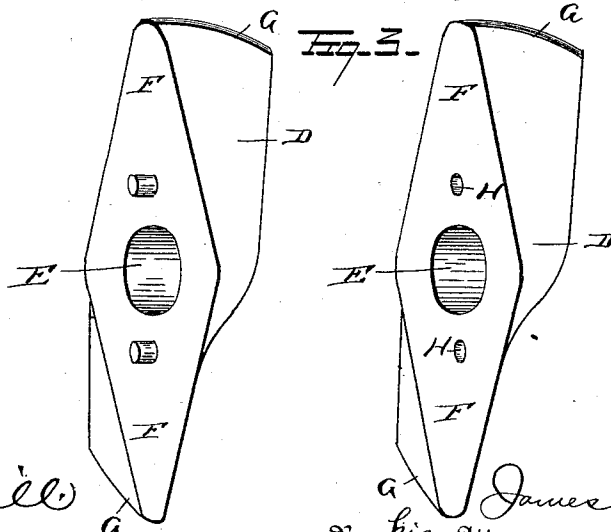


FIG. 3.



Witnesses

Wm. F. Gill

J. Warner

Inventor

James Nelson

By his Attorneys

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JAMES NELSON, OF TITUSVILLE, PENNSYLVANIA.

GRAIN-CONVEYER.

SPECIFICATION forming part of Letters Patent No. 349,233, dated September 14, 1886.

Application filed May 25, 1886. Serial No. 203,235. (No model.)

To all whom it may concern:

Be it known that I, JAMES NELSON, a citizen of the United States, residing at Titusville, in the county of Crawford and State of Pennsylvania, have invented a new and useful Improvement in Grain-Conveyers, of which the following is a specification.

My invention relates to an improvement in grain-conveyers; and it consists in an endless screw-conveyer, which is formed of separable sections secured together on a rotating shaft, as will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is an elevation of a conveying-screw embodying my improvements. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a detail perspective view of two sections of the screw detached from each other.

A represents a conveying-screw having the shaft B, which is journaled in the ends of the usual conveying-trough, C, the screw working in the said trough. The screw is composed of a number of sections, D, which are provided each with a central opening, E, to receive the rotating shaft, and from the said central opening the sections are provided with outwardly-extending arms F, which extend from opposite sides of the central opening and are beveled on opposite sides, so as to form thin blades G, as shown. The sides of the said blades, at the outer ends of the same, are parallel with each other. The blade G on one side of the section is beveled in a contrary direction from the blade on the opposite side of the section, and the inclination of the blade is proportioned to the required pitch of the screw. These sections are each provided on one side with openings H, and on the opposite side with projecting dowel-pins adapted to enter similar openings, thereby securing the sections of the screw

together and on the central shaft, and forming a conveyer having two screw blades or wings, one of which extends from each side of the shaft.

Screw-conveyers heretofore constructed are provided with only a single screw-blade. My improved form of screw-conveyer is provided with two screw-blades, thereby doubling the capacity of the conveyer, as each of the blades by the rotation of the screw forces an equal quantity of grain forward through the trough.

The separable sections hereinbefore described may be made of wood, iron, or any other preferred material, and the sections forming the ends of the screw are secured to the central shaft by means of screws or bolts K, thereby locking or securing the blades firmly to the shaft and causing them to rotate therewith.

Having thus described my invention, I claim—

1. The combination of the central rotating shaft and the sections D, secured thereto and to each other, the said sections being each provided with oppositely-extending arms beveled on opposite sides, and forming blades which incline in opposite directions, substantially as described.

2. The combination of the shaft and the sections D, secured thereto, the said sections having the recesses or openings H on one side and the dowel-pins I, projecting from the opposite side, to enter the recesses of the adjacent sections, for the purpose set forth, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES NELSON.

Witnesses:

GEO. H. BEATTIE,
JOHN YOUNGS.