

D. L. Bartlett,

Grain Conveyer.

No. 85,782.

Patented Jan. 12. 1869.

Fig. 1.

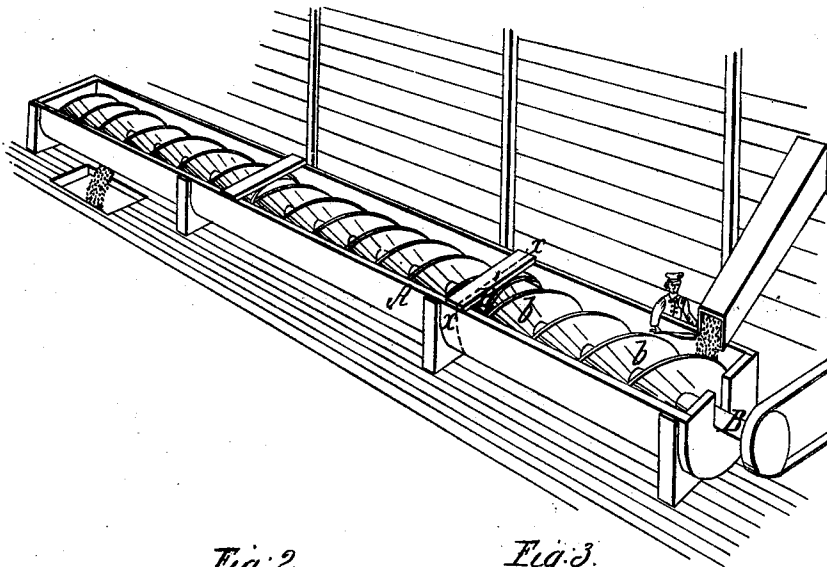


Fig. 2.

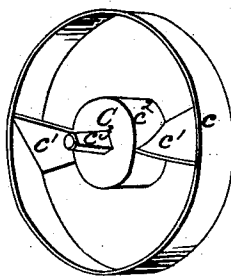
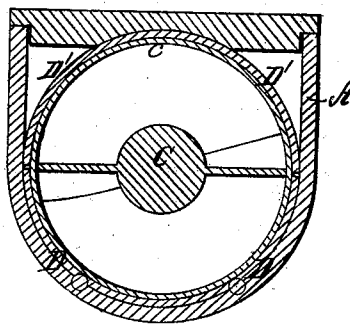


Fig. 3.



Witnesses;
R. F. Brown
S. J. Hoyer

Inventor;
David L. Bartlett
By H. M. Beadle
Atty.

United States Patent Office.

DAVID L. BARTLETT, OF ROCKFORD, ILLINOIS.

Letters Patent No. 85,782, dated January 12, 1869.

IMPROVED GRAIN-CONVEYER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, DAVID L. BARTLETT, of Rockford, in the county of Winnebago, and State of Illinois, have invented new and useful Improvements in Grain-Conveyers; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to certain improvements in screw-conveyers for grain, and consists mainly in the manner of supporting the shafts, and coupling them together.

The details of construction, and manner of operation, will be fully described hereinafter.

In the drawings—

Figure 1 is a perspective view of my invention;

Figure 2 is a perspective view of the coupling-device; and

Figure 3, a transverse vertical section through the line *x-x*, fig. 1.

To enable those skilled in the art to which my invention appertains, to make and use the same, I will proceed to describe its construction and operation.

The object of this invention is to furnish a secure bearing and coupling for the shafts of grain or flour-conveyers, or any other use that it may be applied to, without breaking the continuity of the screw.

The ordinary arrangement now in use is open to two objections: first, in case of sticks or other obstructions getting into the conveyer, they are liable to catch up the coupling and tear out the flights or threads of the screw; second, the shafts, when the conveyer is full of grain, are liable to spring out of line. These objections are obviated by my improved arrangement.

A represents the triangle or box through which the grain is conveyed.

B represents the shaft, upon which are placed the flights *b b*, in the ordinary manner.

This shaft may be supported at each extreme end by bearings of the ordinary construction, if desired, the grain being received above at one end, and discharged below at the other.

Any other suitable arrangement, of course, can be

made, which will accommodate the peculiar circumstances of the case.

The different parts of the shaft are coupled together and supported by means of the joint C, the construction of which is clearly shown in fig. 2.

This consists of a ring, *c*, screw-threads, *c'*, and hub, *c''*, in which latter are firmly fixed the projections *c'''*, fitting snugly into the sockets in the ends of the shafts to be connected.

D represents a semicircular bearing-ring, securely attached to the bottom of the box, as shown, which may or may not be provided with friction-wheels, as is desired.

D' represents a similar ring, securely attached to a beam extending across the top of the triangle, as shown.

This beam should be removable, in order to permit the shafting to be put in place or taken down, when desired.

When all the parts are in place, the ring *c*, of joint C, rests upon and is held by the bearing-rings D D'. The joint C is also so arranged, relatively to the contiguous ends of the shafting, that its screw-threads coincide with the flights upon the latter, so that the screw is continuous throughout the entire length of the conveyer.

By this arrangement, the catching of obstructions at any part is rendered impossible, and the shafting also is so securely held upon all sides that it cannot, by any means, be sprung out of line.

This conveyer, of course, may be used for any suitable purpose.

Having thus fully described my invention,

What I claim, and desire to secure by Letters Patent of the United States, is—

The joint C, constructed as described, in combination with the bearings D D', when used in connection with a grain-conveyer, substantially as described.

This specification signed and witnessed, this 19th day of September, 1868.

DAVID L. BARTLETT.

Witnesses:

H. G. CLARK,
G. W. FORD.