

(No Model.)

2 Sheets—Sheet 1.

D. A. ROBINSON.
SWIVEL SPOUT TRACK.

No. 531,649.

Patented Jan. 1, 1895.

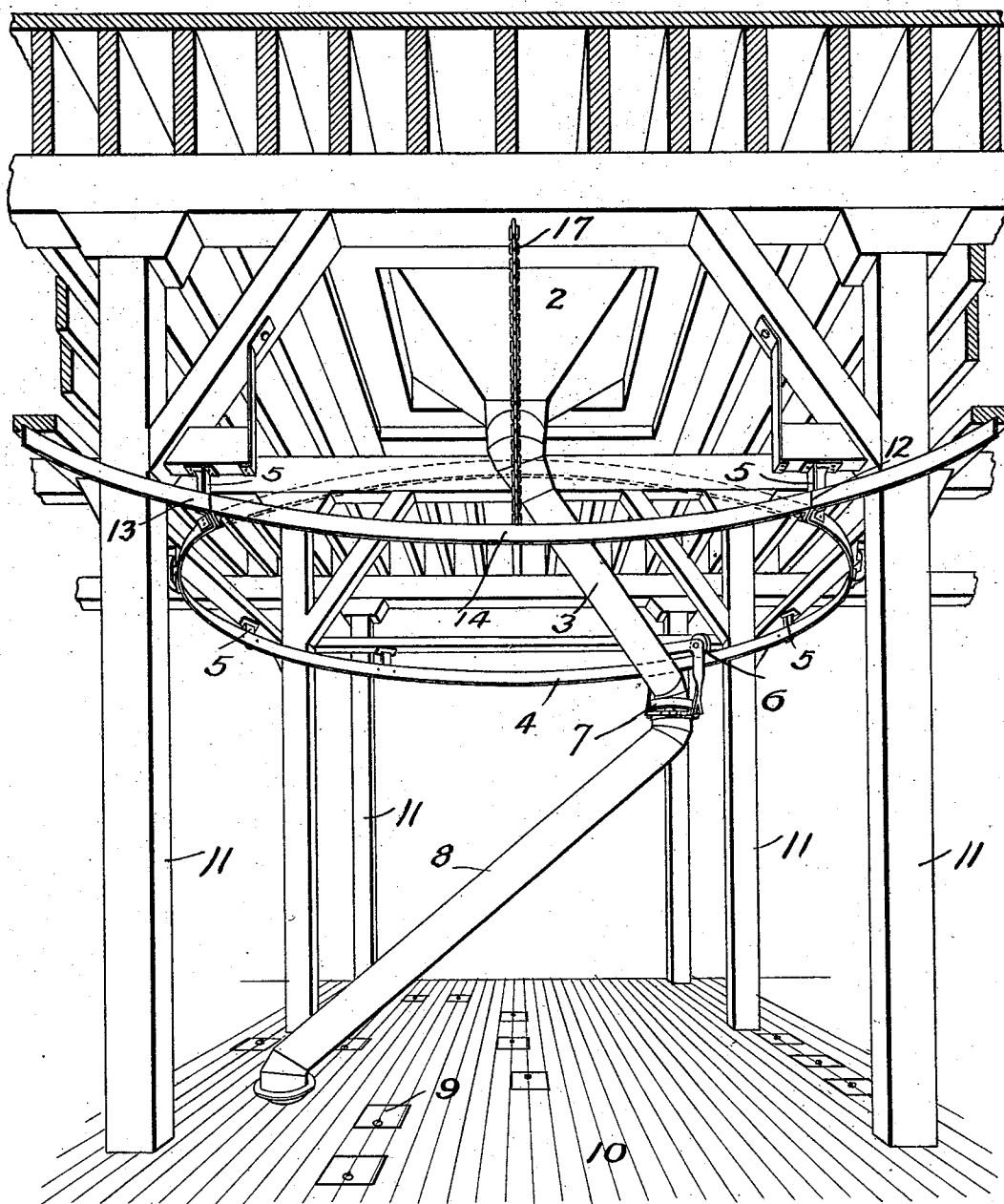


Fig. 1.

Witnesses

G. C. Purple
J. H. Lyon

Inventor

Dighton A. Robinson.
By Paul & Hawley & Co.

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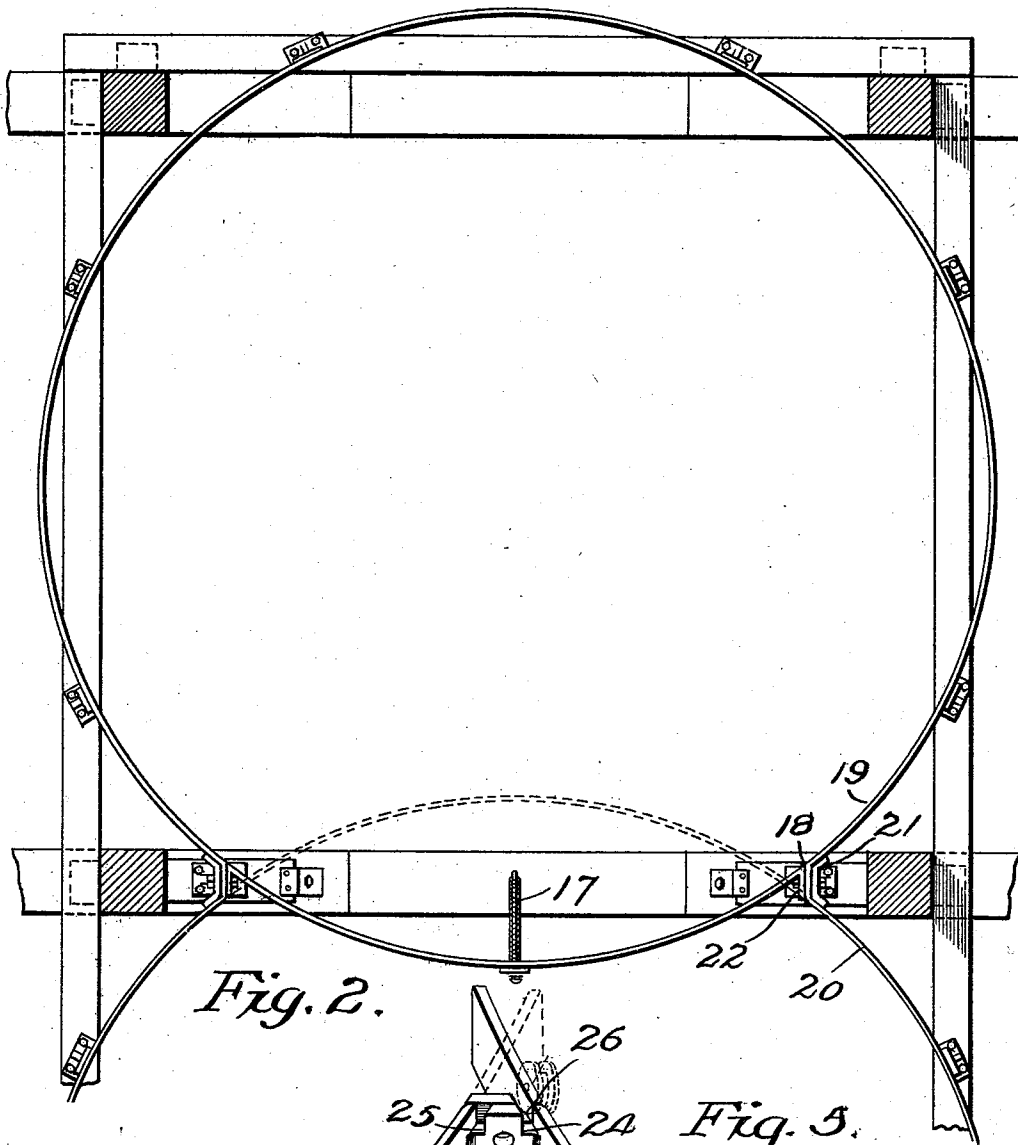


Fig. 2.

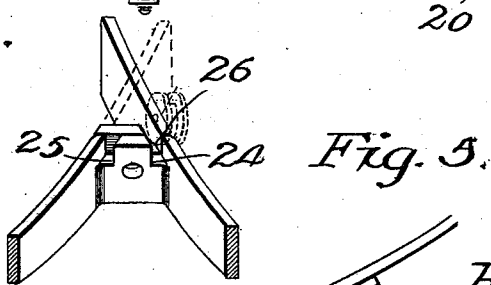


Fig. 3.

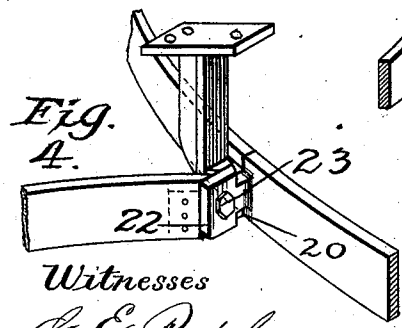


Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

DIGHTON A. ROBINSON, OF MINNEAPOLIS, MINNESOTA.

SWIVEL-SPOUT TRACK.

SPECIFICATION forming part of Letters Patent No. 531,649, dated January 1, 1895.

Application filed January 27, 1894. Serial No. 498,183. (No model.)

To all whom it may concern:

Be it known that I, DIGHTON A. ROBINSON, of the city of Minneapolis, county of Hennepin, State of Minnesota, have invented a certain new and Improved Swivel-Spout Track, of which the following is a specification.

My invention relates to means for supporting the lower section of a swiveled grain spout, and the object of my invention is to provide a combination track for use beneath two or more adjacent hoppers or bins, and by means of which a greater radius may be had for the circle of the track and a greater length for the upper section of each swiveled spout; and further, to provide a combination track which will permit the bins or hoppers from which the spouts extend to be placed closely together while retaining all of the above advantages for the spout itself.

To this end my invention consists in the combination with two or more circular and intersecting tracks, of a completing or reversible arc-strap or track-section arranged between the intersecting points of each pair of tracks, whereby either one or the other may be made into a true circle and my invention further consists in details of construction and in combinations all as hereinafter described and particularly pointed out in the claims.

The invention will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 is a perspective view showing a spout embodying my invention. Fig. 2 is an enlarged plan view thereof from beneath. Fig. 3 is an enlarged detail view of an intersecting point and a hanger. Fig. 4 is a detailed perspective view of the intersecting point of the tracks, the reversible section and of the hanger. Fig. 5 is a similar view from behind, the hanger being removed.

In the drawings, I have illustrated my invention as applied in a grain elevator building, in Fig. 1 showing the distributing room which in such building lies beneath the garner or weighing bin floor and above the storage bins.

2 represents the bottom of a hopper projecting through the ceiling of the room and upon the lower end of which is swiveled the upper section 3 of the swiveled spout. Such bins or hoppers are arranged along in a row

and are comparatively close together. Some distance beneath each hopper and concentric therewith is a large circular track 4, which is suspended from the framing or ceiling by suitable hangers 5, which hangers I arrange so that they do not interfere with the flanged wheels 6 which run upon the top of the track, and from which is suspended the basket or head 7 of the long lower section 8 of the swiveled spout. The usual small trap doors 9 are arranged irregularly in the floor 10 and from these spouts extend to the underlying storage bins. These trap door openings are some of them arranged at a considerable distance from the more convenient location directly beneath the hopper, and it is therefore desirable that both sections of the swivel spout be as long as possible and yet capable of easy manipulation around and between the posts 11. Hence the circular tracks are made as large in diameter as the positions of the posts 11 will permit, which construction obviously results in the intersection of adjacent tracks. In order to retain the large size of both the adjacent circular tracks and at the same time render either useful at will, I arrange between the intersecting points 12 and 13 of the two tracks, an arc-section 14, the ends of which are pivoted at the intersecting points so that the arc-section may be thrown from one position into the other as shown by full and dotted lines. A chain or cord 17 extends from the ceiling, to support the arc section in either position, being attached to the back thereof.

The construction of the device at the intersecting point is clearly shown in Figs. 3, 4 and 5. A flat plate or surface 18 is made at the intersection of the two ends 19 and 20 of the two circles or large arcs, the same band of iron being preferably formed around the lower end of the hanger 21. The end of the arc section is bent back to form a bearing plate or end 22 which is pivoted upon the bolt 23 extending through the same and secured in the hanger. As best shown in Fig. 5, notches 24, 25 and 26 are cut in the vertical parts 18 and 22 to allow the passage of the flange of the supporting pulley or pulleys, the notches 24 and 25 registering opposite the notches 26 in the opposite sides or edges of the part 22. The principal advantage, however, lies in the size of the circular tracks,

which size is made possible by the intersection thereof. It is obvious that the intersections may be made with one or more parts of any given circular track.

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

1. For adjacent swiveled devices, the combination, of curved single tracks intersecting
10 each other at two points and having their opposite points of intersection connected by an arc section adapted to be moved into alignment with either track to complete the same, substantially as described.

15 2. The combination, with two circular intersecting tracks, of supports therefor, and the reversible or swinging arc-section con-

necting the intersecting points or parts of said tracks, and means for supporting said swinging section in either position, substantially as described. 20

3. The combination, with the intersecting tracks, of the supports therefor, the flat parts at the intersecting points, the swinging section having the back turned ends to engage
25 said flat parts, and means for pivoting the same thereon, substantially as described.

In testimony whereof I have hereunto set my hand this 17th day of January, 1894.

DIGHTON A. ROBINSON.

In presence of—

M. L. ALLEN,

F. E. WICKLIN.