

W. C. CURRY.

SILO.

APPLICATION FILED APR. 1, 1912.

1,050,007.

Patented Jan. 7, 1913.

Fig. 1.

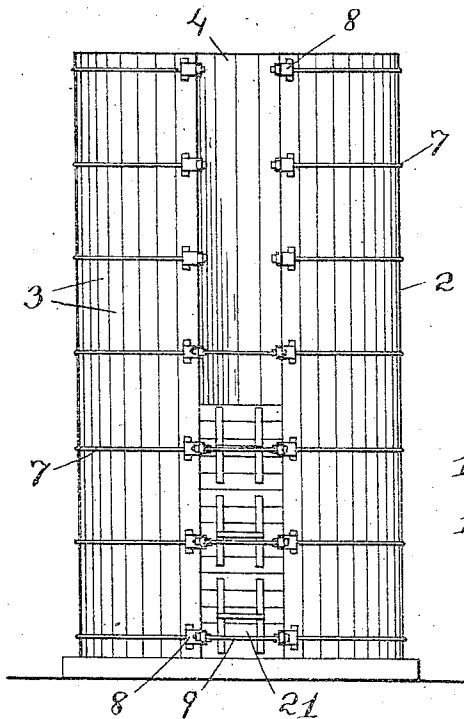


Fig. 6.

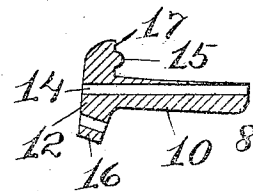


Fig. 5.

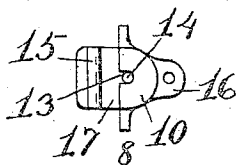


Fig. 2.

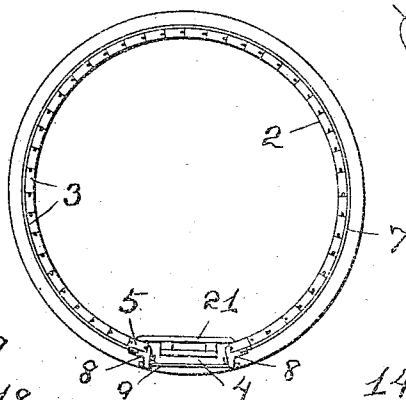


Fig. 4.

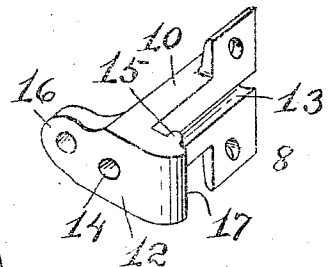
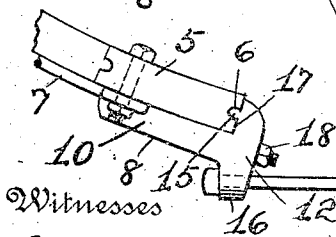


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

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SILO.

1,050,007.

Specification of Letters Patent.

Patented Jan. 7, 1913.

Application filed April 1, 1912. Serial No. 687,764.

To all whom it may concern:

Be it known that I, WILLIAM C. CURRY, a citizen of the United States, resident of Louisville, in the county of Jefferson and State of Kentucky, have made a certain new and useful Invention in Silos; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a front view of a silo, without the cover, having my invention applied thereto. Fig. 2 is a plan view of the same. Fig. 3 is a detail view partly in section showing the lugs and the strap and tie connections therewith. Fig. 4 is a detail perspective view of one of the lugs. Fig. 5 is a detail end view of one of the lugs. Fig. 6 is a detail sectional view of a lug having a longitudinal perforation.

The invention has relation to silos or receptacles for ensilage, wherein the body wall is constructed of vertical staves and is provided with an opening from top to bottom, as a doorway.

The invention consists in the novel construction and combinations of devices hereinafter set forth and pointed out in the appended claims.

In the accompanying drawing the numeral 2, represents the body wall of the silo, consisting of a series of vertical staves 3, extending in cylindrical form from the first stave, which forms one edge of the doorway 4, to the last stave of the series, which forms the other edge of the doorway. The staves are connected by tongue and groove joints at their edges, in order to hold them in proper relative position and to render the wall sufficiently airtight and water-tight for the purposes involved. The edge stave 5, is provided with two edge grooves, in order that the doorway staves shall each have an edge groove 6. Door sections are indicated at 21, and these as well as the staves should be coated with a solution of silicate of soda, so that they will withstand moisture.

The staves of the body wall are secured together by means of the tongue and groove joints referred to and a series of metal rods or incomplete hoops 7, which extend at in-

tervals, one above another, from edge-stave to edge-stave around the back of the body, but do not extend across the doorway. In this manner the wall staves are solidly connected from edge-stave to edge-stave, so as to provide a unitary structure. In order to secure the ends of the hoops 7, to the staves which form the edges of the doorway, suitable means preferably lugs 8, are provided, these lugs being designed to engage the ends of the hoops 7, the edges of the doorway staves, and the doorway ties 9. To this end the lug 8, is made in T-form, having a horizontal body portion 10, and a head portion 12, at right-angles to the body portion. The body portion is provided at its end with bearings for bolts extending through the doorway stave. And it is perforated or grooved lengthwise in its attachment side, as at 13, this groove or bearing communicating with a perforation 14, about the middle of the head post. The bearing or groove 13, is designed to terminate flush or nearly so with the bearing surface of the portion 10, or may be open along this surface, the object being to provide for engagement with the hoop at the surface of the stave, the threaded end of the hoop extending through the perforation 14 and being secured by means of a nut 18, whereby the parts are drawn solidly together.

The inner portion or flange 14, of the head forms a bearing to engage the edge of the doorway stave, and in order to provide for a secure engagement, the flange has a vertical rib 15, on its inner or bearing surface, which is adapted to enter and engage the edge-groove 6, of the doorway stave.

The outer portion or flange 16, of the head forms a bearing which is provided with an aperture or seat for the threaded end of a tie rod or strap 17, which is provided with a nut 19. These ties serve to adjust and hold the lugs and the edge-staves of the doorway in proper relative position, and their forward or projecting location is such that they form in vertical series a convenient ladder for ascending the silo.

The ties can be disconnected from the lugs and taken away, so as to leave the doorway unobstructed, when required, and in such case the body wall will be held together by the incomplete hoops, as the staves are held in position by the tension of said hoops be-

tween the terminal staves which form the edges of the doorway.

Having described the invention, what I claim and desire to secure by Letters Patent is:

1. A T-form casting for engagement with the end of an incomplete hoop for a silo, said casting having a head including an inward projecting end lug provided with a vertical rib upon its inner face, and an outward projecting end lug having a perforation, and a body extending back from said lugs and having lateral projections provided with bolt holes, said body and said head having a perforation extending throughout the entire length of said body for engagement with the end portion of said hoop.

2. In a silo, the combination with a series of vertical wall staves having longitudinal tongue and groove joint connection with each other, and end staves separated by a doorway interval and having outer longi-

tudinal grooves, of incomplete hoops extending around the silo and terminating near the outer edges of the end staves, castings having each a longitudinal perforation extending throughout its entire length engaging the end portions of said hoops, each casting having an inward projecting end lug having hook engagement with the outer edge of the end stave, an inner rib extension of said lug in engagement with the groove of the doorway stave, an outward projecting end lug, and bolt connection with the end stave, a nut having threaded engagement with each end of each hoop and bearing against said casting, and tie rods connecting the outward projecting lugs.

In testimony whereof I affix my signature, in presence of two witnesses.

WILLIAM C. CURRY.

Witnesses:

A. G. ROBINSON,
H. S. THOMAS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."