J. B. STRUNK.
SELF DRAINING JOINT FOR SILO STAVES.
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Inventor

Witness

Joseph B. Strunk

My

Attorneys
To all whom it may concern:

Be it known that I, Joseph B. Strunk, a citizen of the United States, residing at Mill Hall, in the county of Clinton and State of Pennsylvania, have invented certain new and useful Improvements in Self-Draining Joints for Silo-Staves; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide a self-draining joint for silo staves which is so constructed as to prevent any possibility of splitting one of the staves when driving it against another to form the joint between the two; and with this general object in view, the invention resides in the specific construction of the joint as herein described and claimed, and shown in the accompanying drawing wherein:

Figure 1 is a side elevation of a silo showing the manner in which the joints between the staves are preferably located;

Fig. 2 is an enlarged vertical section showing one of the improved joints;

Fig. 3 is a horizontal section on the plane of the line 5—5 of Fig. 2;

Fig. 4 is a perspective view showing the co-acting ends of two staves in juxtaposition; and

Fig. 5 is a perspective view of the channel used between the staves.

In the construction of silos, since staves cannot be obtained of sufficient length to run from top to bottom, it is necessary to splice these staves and the joints are preferably arranged substantially as shown in Fig. 1, so that no two adjacent joints are in line. Experience has taught that the most practical joint between the lower stave sections 1 and the upper sections 2, must include a pointed upper end on the former and a channel in the lower end of the latter for receiving said pointed end. This form of construction has proven more or less efficient, but it has been found that splitting of the lower ends of the staves often takes place when they are driven one toward the other. My invention therefore aims to overcome this difficulty by the provision of an abutment or shoulder in the channel of the upper section to coact with a squared-off part of the lower section to limit the driving of one toward the other. Specifically described, the improved joint is constructed as follows:

The upper end of the lower section 1 is provided with a kerf 3 aligning with a similar kerf 4 in the lower end of the upper section 2, both kerfs opening through the edges of the stave and receiving the usual metal spline 5. At 6, the upper end of the section 1 is beveled from its opposite sides to the spline 5 to provide a pointed end 7 and said end is squared off to one side of the spline 5 at right angles to the length of the stave. The lower end of the upper section 2 is formed with a V-shaped channel 9 opening through its edges and receiving the pointed end 7 of the section 1, said channel having the kerf 4 at its vertex and having on one of its converging walls a shoulder 10 which abuts the squared-off end 8 and thus limits the driving of one stave section toward the other as to prevent any possibility of splitting.

The staves are tongued and grooved on their edges in the usual manner and in applying them, the contacting surfaces of the several staves are coated with paint or white lead in the usual manner. Thus the improved joint is equally as efficient as the old joint for excluding moisture from either the interior or exterior of the silo, yet is of greater advantage due to the provision of the shoulder 10 and squared end 8. Since excellent results are obtained from the exact arrangement shown and described, this arrangement is preferably employed, but minor changes which do not affect the spirit of the invention may well be resorted to.

I claim:

In combination, a pair of silo staves abutting at their ends and each having a kerf opening through its end and through its edges, a metal spline in said kerfs, the end of one stave being beveled from its opposite sides to said spline to form a pointed end, said end being squared off at one side of said spline, the end of the other stave having a V-shaped channel opening through the edges.
of said stave and having the kerf of said stave at its vertex, said channel snugly receiving said pointed end of said first described stave and having on one of its converging sides a flat shoulder abutting said squared off end to limit the driving of one stave toward the other.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOSEPH B. STRUNK

Witnesses:

ELMER LEOLING,

W. A. KISSINGER.

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