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KILN ACCESSORY

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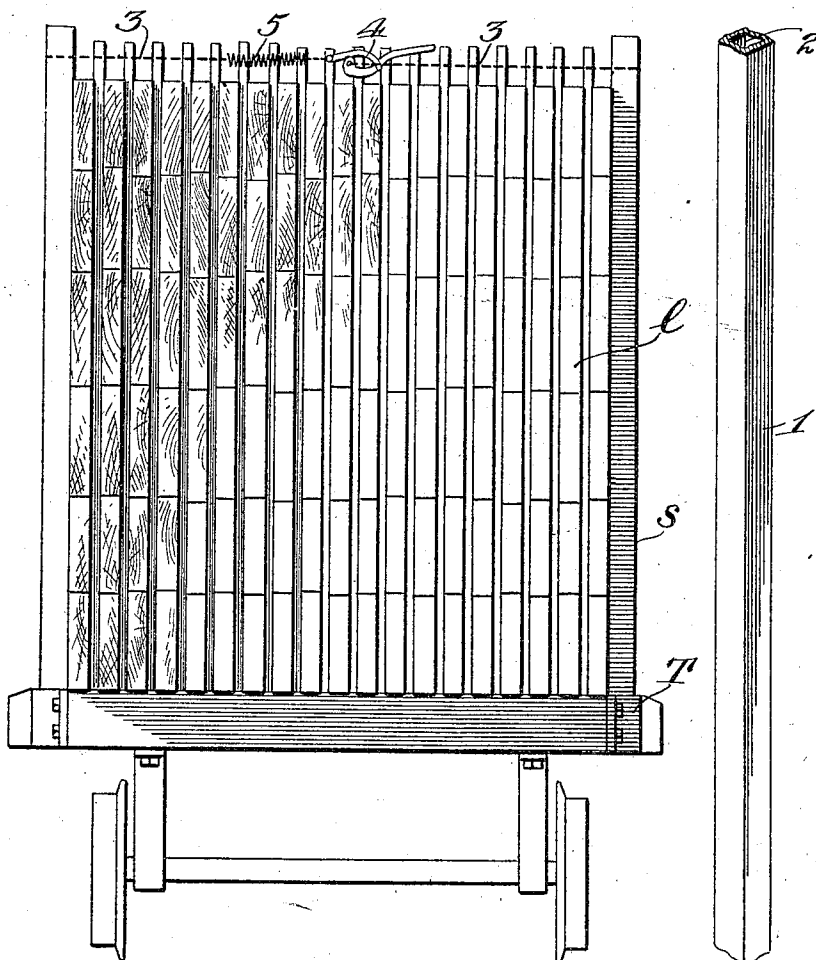


Fig. 1.

Fig. 2.

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KILN ACCESSORY.

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To all whom it may concern:

Be it known that we, FRANK T. KELLEHER and SAMUEL R. BROWN, citizens of the United States of America, residing at Bend, in the county of Deschutes and State of Oregon, have invented certain new and useful Improvements in Kiln Accessories; and we do hereby declare that the following is a full, clear, concise, 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.

This invention relates to improvements in kiln accessories, having for an object to provide a novel form of "sticker", commonly employed in the kiln drying of lumber, whereby the lumber when loaded onto a truck or similar device will be spaced, in order that circulation of the heated air therebetween may be effected, the invention having for an object to provide a "sticker" of hollow metal construction which when positioned between the lumber will permit of an even greater circulation of heated air therebetween, as well as afford a number of highly advantageous features to be presently set out.

In the drying kilns now employed for drying lumber, "stickers" are employed for separating and producing air circulating ways between the lumber. These "stickers" are constructed of strips of wood, square or substantially square in cross section and preferably formed of fir or spruce, costing from ten to twenty cents apiece. While the "stickers" thus constructed will serve to space the lumber, they will, with usage upon an average of three trips through a kiln, become exceedingly brittle and charred, thus entailing a considerable loss by breakage with handling or unstacking of the dried lumber; also, the "stickers" will shrink unevenly and in consequence, fall from between the dried or drying lumber, often times breaking and seriously interfering with movement of the lumber supporting truck. A further disadvantage of using the wooden "stickers" is that the same will cause uneven drying of lumber because of the fact that those portions of the lumber adjacent or contacting with the "stickers" will not be reached by the drying heat, and therefore, will result in the presence of wet spots in the finished lumber. By the use of our improved "sticker", the above noted disadvantages are removed. The hollow metal "sticker" possesses

a maximum potential strength and will be seldom broken, notwithstanding its subjection to rough usage; further, should the same be bent, it can be readily and quickly straightened. Additionally, by reason of the hollow construction of the improved "sticker", air currents of greater volume will be permitted to circulate between the lumber in course of drying, hence expediting drying of such lumber as well as avoiding the leaving of wet spots in the finished lumber, in that the heat conductive qualities of the metal will permit the direct transmission of heat to those portions of the lumber engaged or contacting with the sides of the "stickers".

Other objects of the invention will be in part obvious, and in part pointed out hereinafter.

In order that the invention and its mode of application or use may be readily understood by persons skilled in the art, we have in the accompanying illustrative drawings, and in the detailed following description based thereupon, set out one possible embodiment of the same.

In these drawings:

Figure 1 is an end elevation of a truck having lumber supported thereon and held in spaced relation by the improved "stickers"; and,

Figure 2 is a fragmentary detail in perspective of one of the "stickers".

Having more particular reference to the drawings, in connection with which like characters of reference will designate corresponding parts throughout, the reference letter T designates a lumber carrying kiln truck having vertically disposed side stanchions or arms rigidly connected to the opposite sides thereof whereby to permit the stacking of the lumber L upon the same, either in edgewise relation, as shown in the Figure 1, or in horizontal positions, as may be required.

The lumber L in being stacked upon the truck T is separated, when stacked edgewise, as shown in this embodiment of the invention, into vertical divisions or columns, whereby the heated air in the kiln will be permitted to circulate through and between such ways and in consequence, be brought into contact with the lumber L in course of drying.

To retain the lumber in these separated columns or divisions, our improved "sticker"

is employed, the same being herein generally indicated by the numeral 1 and consisting of a single length of metal tubing, preferably, substantially square in cross section, as shown in the Figure 2. Because of the hollow construction or formation of the tube 1, it will be understood that an air circulating way 2 will be provided through the same, and in consequence, with positioning of the improved "sticker" between the lumber 7, a greater volume of drying air will be permitted to circulate by and between such lumber, thereby expediting the drying of the same. Furthermore, it will be understood that because of the passage of heated air through the way 2 provided for by the hollow "sticker" 1, the sides of such "sticker" will become heated to a degree corresponding to the temperature of the heated drying air within the kiln, and in consequence, the metal of the "sticker" will serve to directly transmit heat to those portions of the lumber 7 contacting with the sides of such "sticker." Hence, such contacting portions of the lumber will be effectively dried, and in consequence, the presence of wet spots in lumber at those points engaged by "stickers" will be avoided. In this connection, it should be mentioned that in the forms of "stickers" now generally used in lumber drying, uneven drying of the lumber is brought about because of the fact that those portions of the lumber engaging or contacting with the sides of the "stickers" employed will be prevented from having the proper drying heat applied thereto, it being borne in mind that these "stickers" are of solid construction and formed of wood.

It is to be also understood that the construction of our improved "sticker" is such as will render the same exceedingly durable, and therefore, prolong the period of usage of the same. Breaking of the "stickers" during handling of the same will be reduced to minimum, and furthermore, warping or shrinking of such "stickers," as is the case with the wooden "stickers" now generally used, will be positively prevented. Should, however, the "stickers" become bent, because

of extreme rough usage, the same, of course, may be readily straightened.

The tubing from which the improved "sticker" is constructed may be of any well known and approved type or grade, it being preferable to employ that form of tubing wherein the jointure between the meeting ends of the same are spot-welded or similarly joined, in order to prevent the appearance or presence of seams upon the adjacent walls thereof. In consequence, flush engagement of the "stickers" with the lumber upon all of its walls will be secured.

A "sticker" constructed in accordance with the invention, of course, may be formed of different lengths, such as conditions or preference may dictate, and in positioning the same between the lumber 7, the usual means for securing such lumber in its stacked position, may be employed, such for example, tying chains 3 having the usual separable fasteners 4 interposed therein and a contractile coiled spring 5 preferably interposed in one of said tying chains 3 whereby to secure a yieldable engagement or connection as between such lumber and said tying chains.

Manifestly, the construction shown is capable of considerable modification, and such modification as is within the scope of our claims, we consider within the spirit of our invention.

We claim:—

1. A lumber "sticker" comprising an elongated hollow body.
2. A lumber "sticker" comprising a hollow elongated body having the opposite sides thereof flattened.
3. A lumber "sticker" comprising a tubular metal body having the various side walls thereof flattened.
4. A lumber "sticker" comprising an elongated tubular metal body having the sides thereof flattened and free of seams.

In witness whereof we have hereunto set our hands.

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