

(No Model.)

J. JONES.
HOOP.

No. 554,446.

Patented Feb. 11, 1896.

Fig. 1.

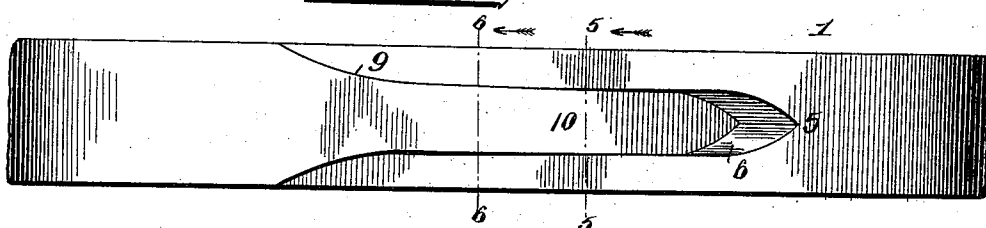


Fig. 2.

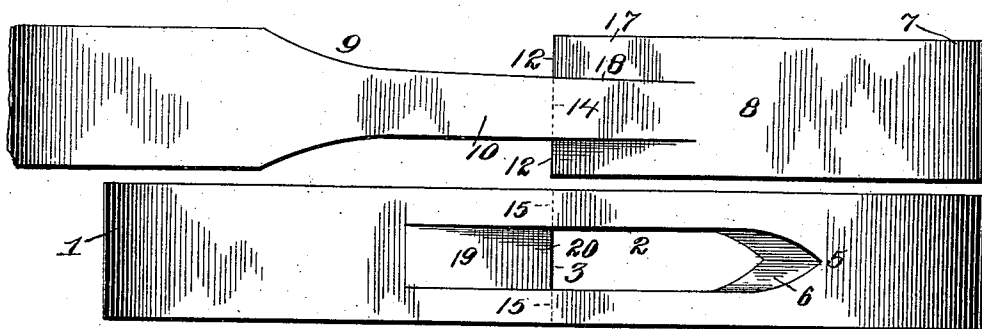


Fig. 3.

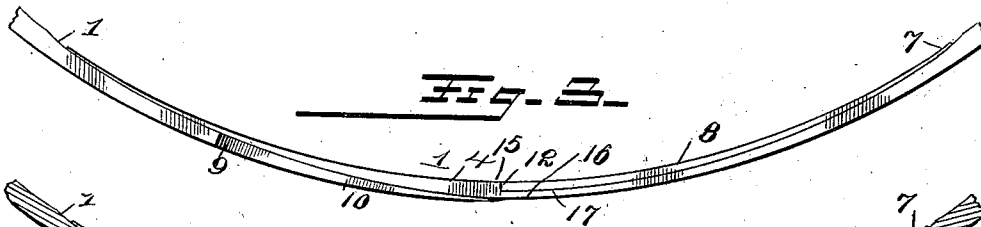


Fig. 4.

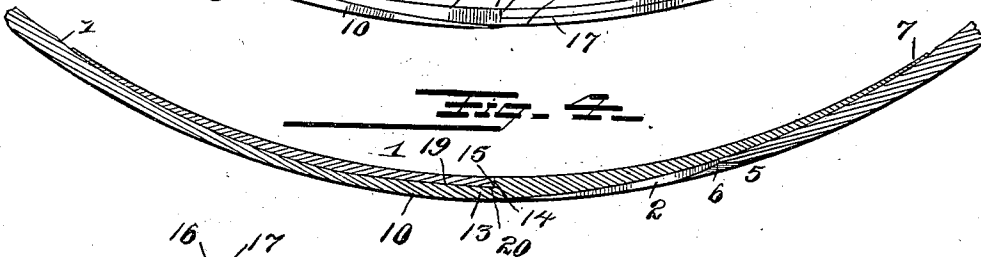


Fig. 5.

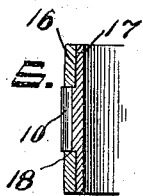
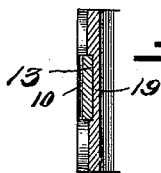


Fig. 6.



Witnesses

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JOSIAH JONES, OF HALLSVILLE, MISSOURI.

HOOP.

SPECIFICATION forming part of Letters Patent No. 554,446, dated February 11, 1896.

Application filed September 13, 1895. Serial No. 562,423. (No model.)

To all whom it may concern.

Be it known that I, JOSIAH JONES, a citizen of the United States, residing at Hallsville, in the county of Boone and State of Missouri, have invented a new and useful Hoop, of which the following is a specification.

My invention relates to hoops, and particularly to the means of joining together the meeting ends of the hoop so as to do away with nails or staples and with the liability of the hoop to loosen and come apart.

The object of my invention is to provide a hoop-lock adapted to any band or tie, whether used on a barrel, pail, tank, bale or any other place, which will secure a smooth joint flush with the inner face of the joined members, and which also leaves a smooth outer surface with no loose ends, and which cannot be loosened by any strain, either lateral or longitudinal, short of bursting the hoop itself.

In the drawings accompanying and forming a part of this specification, Figure 1 is a front elevation of my improved hoop. Fig. 2 is a similar view of the locking ends separated in unlocked position. Fig. 3 is a plan view thereof in locked position. Fig. 4 is a central longitudinal section thereof. Fig. 5 is a cross-section on line 5 5 of Fig. 1, and Fig. 6 is a similar cross-section on line 6 6 of Fig. 1.

One end of the hoop 1 is provided with an elongated slot 2, whose squared outer end 3 terminates at the point in the hoop where the outer bevel 4 begins. The sides of slot 2 converge at the rear end 5, which end is beveled to provide a guiding-groove 6 to aid in directing the thin edge 7 of the opposing end 8 of the hoop. This end 8 is provided on either edge with notches 9 cut down slantingly from their rear ends to form a nick or shank 10, and cut directly in at right angles to the hoop edges at their outer ends to form retaining-shoulders 12 projecting laterally from either side of said shank 10.

The end 8 is adapted to be bent around obliquely below and in front of the slotted end, and its edge 7 is then inserted through slot 2 until the shank portion 10 passes into said slot. The two ends are then brought back into alignment and the shoulders 12 hooked behind the outer end of the slot. To insure certainty of alignment and rigidity

and compactness, I shave down the inner side of shank 10 at 13 so as to thin it toward the shoulders, and then cut out an inner shoulder 14 aligned with shoulders 12. This inner shoulder 14 is arranged to abut against a similar transverse shoulder 15, formed by shaving the side walls of the slot 2 on their inner faces from the rear end of the slot outward to form recesses 16, terminating in the square shoulder 15 aligned with the slot end 3. In order to allow the adjacent inner surfaces of the portions of the hoop beyond said shoulder 12 and 13 to align properly flush with each other, I thin down the portions 17 beyond shoulders 12, leaving walls 18 aligned with shank 10 parallel to the hoop edges so that said portions 17 may lie in and correspond to the recesses 16. A flat groove 19 is also provided, sloping outwardly from end 3 of the slot, to receive the shank 10. The rear bottom end 20 of this groove 19 is flush with the inner faces or bottoms of recesses 16. Thus it will appear that, inasmuch as shoulder 14 is of the same depth as shoulder 15, the arrangement just described will necessitate that the abutting inner edges of said shoulders shall lie flush with each other.

The operation of my hoop lock or joint has already been alluded to. It consists of twisting the hook end 8 so as to pass its thin edge 7 through the slot 2 with the aid of guiding-groove 6. The hoop is then allowed to spring back into its normal plane, which brings the shoulders 12 and 14 of the hook end 8 locked or hooked against shoulder 15 of the slot end of the hoop. Shank 10 now rests snugly with its side 13 in flat groove 19, and the thinned strips 17 occupy the recesses 16, the adjacent walls 18 thereof abutting against the side walls of the slot and the edges of the shank 10 resting against the walls of groove 19.

My improved interlocking arrangement of the hoop ends has been described as applied to a wooden hoop; but of course the same form and arrangement of parts is equally applicable to metallic hoops or to any separated parts which are to be hooked together and permit of a twisting motion, as in clasps for hawesers, splices, &c.

What I claim is—

1. An interlocking joint for two independent ends, one end being provided with a closed

longitudinal slot, a recessed portion behind said slot tapering from a thin rear end to a deeper outer end in alignment with the outer end of said slot whereby a single transverse shoulder is formed extending entirely across the end, a central longitudinal neck or shank in the other end provided at its outer end with a single inner transverse shoulder extending entirely across the end and also provided with two lateral shoulders, one on either side of said shank aligning with and constituting parts of said transverse shoulder, whereby each of said ends is provided with but a single shoulder which extends transversely entirely across it and both of said shoulders being adapted to co-operate, substantially as described.

2. In a locking-joint for a hoop, the combination with the two usual ends beveled to thin edges at their extremities, one end having a tapering recess formed in the inner side of one hoop end and terminating at its outer portion in a transverse shoulder extending entirely across its respective end, a closed longitudinal slot through said end outwardly beveled at its rear end and terminating at its outer end in alignment with said inner shoulder

der and constituting a part thereof and a shallow groove in the outer side of said hoop end longitudinally aligned with said slot and tapering in at its rear bottom end to align flush with the outer bottom end of said inner recess, a tapered depression on the inner side of the opposite hoop end terminating at its outer end in a transverse shoulder extending entirely across the said end, said hoop end being notched at either edge adjacent to the said depression to form a shank adapted to fit within the aforesaid slot, said notches terminating at their outer ends in shoulders aligned with and constituting portions of the said inner transverse shoulder and said shoulders being cut away on their outer faces to bring said faces in alignment flush with the bottom of said inner depression, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of witnesses.

JOSIAH JONES.

Witnesses:

W. L. ROBINSON,
D. B. CARPENTER,
A. C. HULEN.