

A. ANDRÉN.  
Hoop-Fastener.

No. 210,482.

Patented Dec. 3, 1878.

Fig. 1.

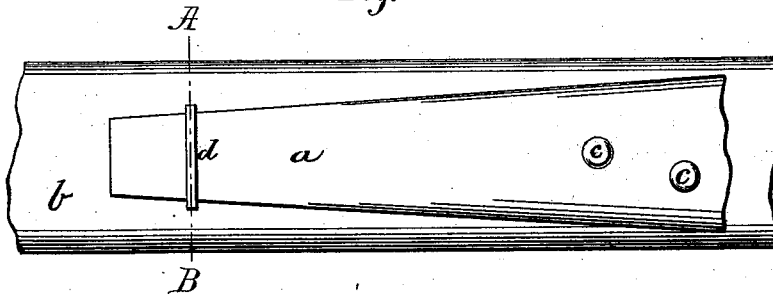


Fig. 2.

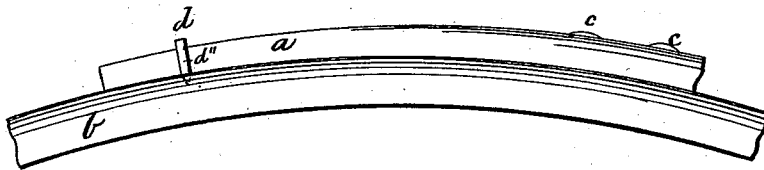


Fig. 3.

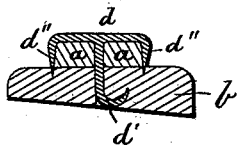


Fig. 4.

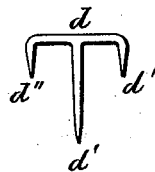
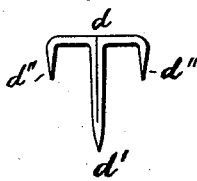


Fig. 5.



Witnesses:

Henry Chadbourn.

Wm. Howard Edwards.

Inventor:

A. Andren

# UNITED STATES PATENT OFFICE.

ALBAN ANDRÉN, OF BEVERLY, MASSACHUSETTS.

## IMPROVEMENT IN HOOP-FASTENERS.

Specification forming part of Letters Patent No. **210,482**, dated December 3, 1878; application filed April 15, 1878.

*To all whom it may concern:*

Be it known that I, ALBAN ANDRÉN, of Beverly, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Hoop-Fastenings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in hoop-fastenings for barrel-hoops of that kind in which one end of the hoop is laid outside of the other end and united by means of nails or rivets; and this my invention consists in a hoop-fastening composed of a staple having an elongated central clinch-nail, the prongs or arms and loops of the staple being for the purpose of embracing the top end of the hoop, and the elongated central nail adapted to be driven through both ends and clinched upon the under surface of the lower end, whereby is secured a reliable hoop-fastening, capable, when in use, of resisting separation of the hoop ends in any direction.

Heretofore the outer end of a barrel-hoop has been united to the inner piece by means of a clinch-nail and a washer, outside of which has been driven an ordinary staple, embracing the outer piece of the hoop and entering the inner one, so as to prevent the end of the hoop from splitting, which arrangement necessitates a twofold manipulation by the workman in driving at one time a clinch-nail and washer, and, secondly, a staple between the extreme end of the outer part of the hoop and the clinch-nail aforesaid; whereas with my improved fastening only one manipulation is necessary—namely, to drive the center piece of the T-nail and clinch it on the under side of the inner part of the hoop at the same time as the side projections are driven, so as to embrace the outer hoop part.

I do not confine myself to any exact proportion of the length of the center piece of the T-nail as compared with its side pieces, as the latter may be either of such a length as to enter the under part of the hoop just a little, or just

touch it without entering, or not touch it at all, as may be desired for various kinds of work or for different purposes.

On the accompanying drawings, Figure 1 represents a plan view of a part of a hoop-joint provided with my improved fastening. Fig. 2 represents a side elevation of the same. Fig. 3 represents a cross-section of the fastening on the line A B, shown in Fig. 1. Fig. 4 represents a side view of my improved T-nail, and Fig. 5 represents the T-nail as being made of wire bent into shape similar to the solid one shown in Fig. 4.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

*a* represents the outer part of an ordinary hoop, and *b* represents the inner or under part of such hoop. *c c* represent the nails uniting the hoop parts in the ordinary way. *d* represents my improved T-nail fastening, having a center part, *d'*, and side pieces, *d'' d''*, as and for the purposes set forth.

In Fig. 3 the center piece, *d'*, is shown as being clinched, and having the side pieces, *d'' d''*, embracing the outer hoop part, *a*, and driven lightly into the upper side of the under hoop-piece, *b*, as shown; but the said side pieces, *d'' d''*, may be made not quite so long in proportion to the center piece, *d'*, in which case they would only embrace the outer hoop part, *a*, without touching the lower hoop part at all.

These nails may be forged, punched, dropped, or bent solid, or made of doubled-up wires, or otherwise, without departing from the spirit of my invention.

I am aware that a staple having four prongs of equal length, which are driven through both parts of the hoop and all clinched upon the inner side, has heretofore been used; but my invention differs very materially from this, that in using it but one through perforation of the ends of the hoop is necessary, while the fastening is equally secure, the appearance neater, and liability to split the hoop avoided.

What I wish to secure by Letters Patent, and claim, is—

The hoop-fastening consisting of the staple

*d*, having the short prongs *d''*, adapted to embrace the outer and slightly penetrate the inner end of the hoop, and centrally-elongated clinch-nail *d'*, adapted to pass through both ends of the hoop and be clinched on the inner side thereof, substantially as described.

In testimony that I claim the foregoing as

my own invention I have affixed my signature in presence of two witnesses.

ALBAN ANDRÉN.

Witnesses:

GUSTAVUS GOEPPER,  
FRANCIS ALLEN.