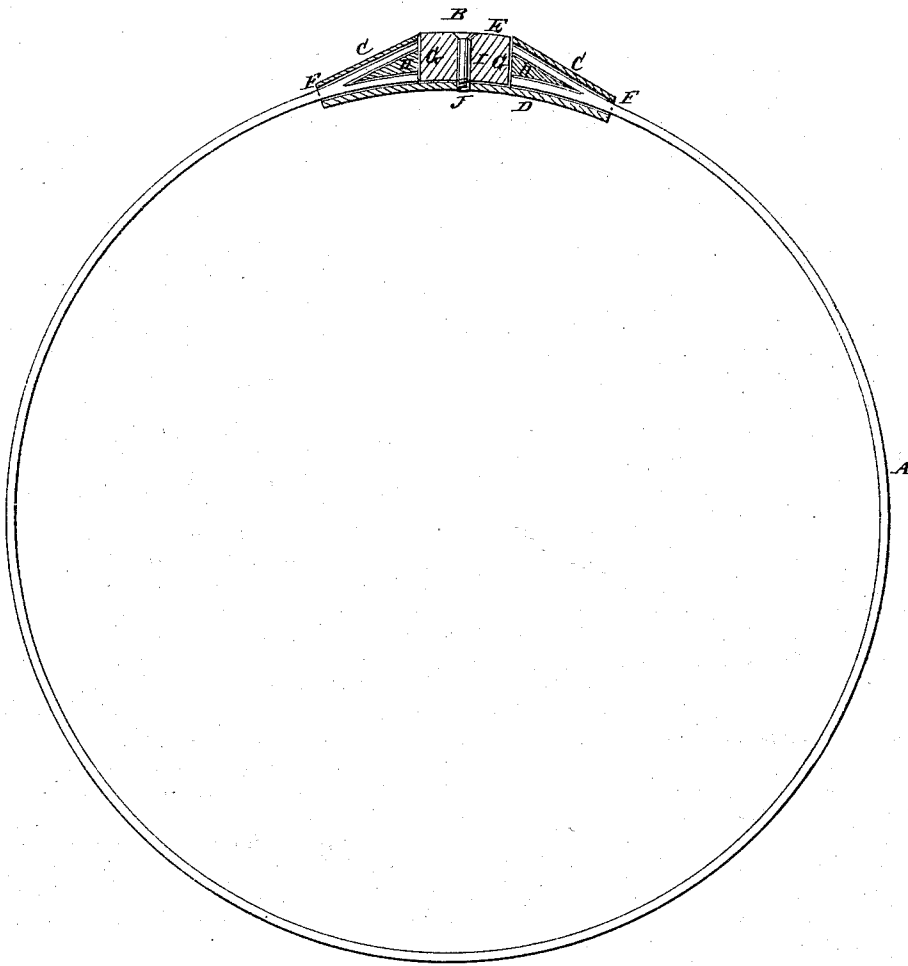


T. E. LUCAS.
Hoop-Locks.

No. 144,117.

Patented Oct. 28, 1873.



Witnesses:

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Per *Wm. H. [Signature]*
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UNITED STATES PATENT OFFICE.

THOMAS E. LUCAS, OF CHESTERFIELD, SOUTH CAROLINA.

IMPROVEMENT IN HOOP-LOCKS.

Specification forming part of Letters Patent No. **144,117**, dated October 28, 1873; application filed July 19, 1873.

To all whom it may concern:

Be it known that I, THOMAS E. LUCAS, of Chesterfield, in the county of Chesterfield and State of South Carolina, have invented a new and useful Improvement in Hoop-Ties, of which the following is a specification:

The object of this invention is to provide a way for fastening or tying the ends of wooden hoops together for barrels, tubs, and other cooper-work, and for other purposes; and it consists in a metallic tie having two sockets connected together, in which sockets the ends of the hoop are wedged, as hereinafter more fully set forth and described.

The accompanying drawing illustrates my invention, it being a longitudinal section of the hoop and tie, showing the construction of the latter and manner of fastening the ends of the hoop.

Similar letters of reference indicate corresponding parts.

A represents the hoop. B is the tie. The tie may be made of either cast or wrought metal, malleable iron being preferable on account of its strength and cheapness. C C are two sockets, which are connected together by the plate D with a space of one inch, more or less, between them marked E. These sockets are wedge-shaped, the ends F F having openings which just admit the ends of the hoop. In width the entire sockets correspond with the width of the hoop; but in depth the inner portions G G exceed the end openings three times, more or less.

In applying the tie to the hoop the ends of the latter are inserted into the socket, and be-

ing split (either before or after insertion) wedges H H are driven, which expands the ends so as to fill the sockets, as seen in the drawing, thus confining the ends of the hoop. These wedges may be secured with glue or cement, or in any durable manner; but I prefer to confine them by means of a block, I, and screw J, the block being equal to the space E, with the screw passing through the center of the block and through the plate D, as represented.

With this tie wooden hoops may be substituted for corroded iron hoops, and wooden hoops which have been rendered useless by the breaking of the ordinary "lock," may be made again available by means of the tie. The wedges may be driven with glue, and instead of splitting the ends of the hoop they may be attached by glue to the outsides of the ends; but I prefer the mode described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The wedge-shaped sockets C, connected by the plate D, and arranged opposite with a space, E, between them to admit of the insertion and removal of the wedges D, as shown and described.

2. The combination of the block I and screw J with the sockets C C, as and for the purposes described.

THOMAS E. LUCAS.

Witnesses:

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