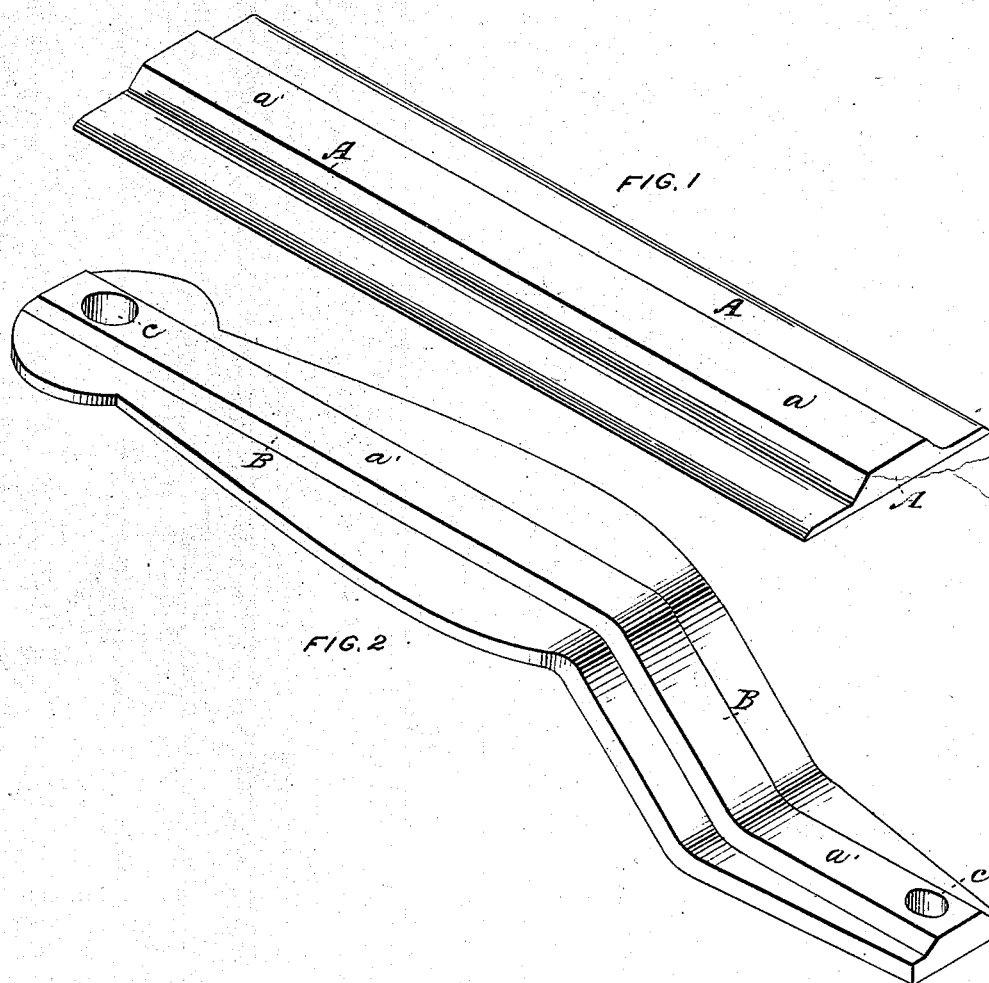


W. J. LEWIS.  
Carriage Iron.

No. 107,929.

Patented Oct. 4, 1870.



WITNESSES:

*Thos. B. Kern*

*R. C. Wenshall*

INVENTOR:

*William J. Lewis*  
*by Bakewell, Christy,*  
*his Attys.*

# United States Patent Office.

WILLIAM J. LEWIS, OF PITTSBURG, PENNSYLVANIA.

Letters Patent No. 107,929, dated October 4, 1870.

## IMPROVEMENT IN HAMMER-STRAPS.

The Schedule referred to in these Letters Patent and making part of the same.

### *To all whom it may concern*

Be it known that I, WILLIAM J. LEWIS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Hammer-Strap; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view of the rolled plate or bar from which my improved hammer-strap is made, and

Figure 2 is a like view of the finished strap.

Hammer-straps for holding in place the double-trees or single-trees of wagons, carriages, &c., have heretofore commonly been made from flat bar-iron of uniform thickness. By my improvement, I produce from rolled ribbed iron, a rolled ribbed hammer-strap, of improved form, and at a much less price than they can be made for by forging from a flat bar.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction.

The bar A is rolled in grooved cylindrical rolls, to the form substantially as shown, that is, with a rib, *a*, on its upper face, or, what is mechanically the same, with a body comparatively thick along the middle and

thinning down each way therefrom to or toward each edge.

Such a bar I cut up into blanks B, of suitable lengths, punch through the rib, in one end, a bolt or staple-hole, *c*, and in the other end a hole, *c'*, for the hammer.

The thin edges of the blank are trimmed at intervals, so as to give any desired form or configuration to the strap. The rib or thickened body *a* gives it the required strength, and also prevents the too rapid wear of the hammer and bolt on the sides of the holes *c c'* next the ends.

After the blanks are trimmed and punched, they are bent to the form required, as illustrated in fig. 2, either between dies or on the anvil.

What I claim as my invention, and desire to secure by Letters Patent, is—

A rolled ribbed hammer-strap, made substantially as described.

In testimony whereof I, the said WILLIAM J. LEWIS, have hereunto set my hand.

WM. J. LEWIS.

Witnesses:

JOHN GLENN,  
THOS. B. KERR.