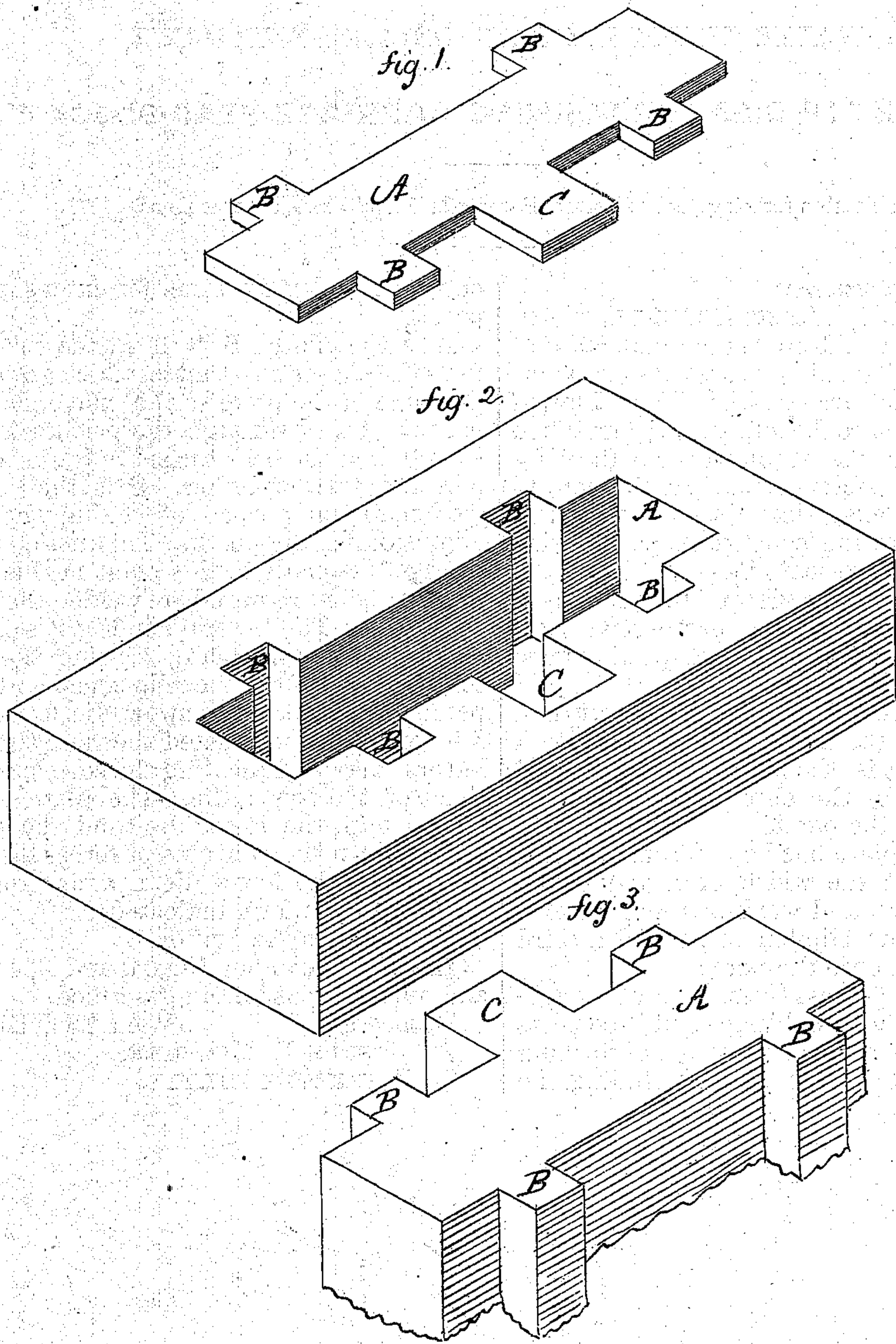


*Wales Terrell's Improvements Forging Carriage Head-Block-Plate*  
[22.]

No. 119,286.

Patented Sep. 26, 1871.



Witnesses.  
John V. Shumway  
A. J. Tibbitts

Wales Terrell  
Inventor  
By his Atty,  
John S. Eade



# UNITED STATES PATENT OFFICE.

WALES TERRELL, OF ANSONIA, CONNECTICUT.

## IMPROVEMENT IN DIES FOR FORMING CARRIAGE HEAD-BLOCK PLATES.

Specification forming part of Letters Patent No. 119,286, dated September 26, 1871.

*To all whom it may concern:*

Be it known that I, WALES TERRELL, of Ansonia, in the county of New Haven and State of Connecticut, have invented a new Improvement in Dies for forming Carriage Head-Block Plates; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents in—

Figure 1, a perspective view of the plate as it comes from the dies; Fig. 2, a perspective view of the lower die; and in Fig. 3, a perspective view of the upper die.

This invention relates to the manufacture of articles known to the trade as "carriage head-block plates"—that is, the plate which is secured to the head-block by the clips, with an arm extending back onto the perch.

Heretofore this plate has been formed by taking a bar of metal the width, or nearly so, required for the plate, and welding thereto transverse pieces for the clip-bar arms and a third piece for extension onto the perch.

By my improved process this is done at a single operation and without welding; and it consists in the construction of dies for cutting or forming the plate complete in one piece, including the

clip-arms and projections for extension onto the perch.

A is the plate; B B B B, the projections to form the clip-arms—that is, which project beyond the edge of the plate so that the ends of the clip may be passed through the perforations formed therein and the nuts turned onto the clips to secure the parts together. C is the central projection, for the purpose of welding the necessary extension for the perch. This article, as shown in Fig. 1, is made to this point in this form, and the extensions required are welded thereto by the consumer. The lower die in Fig. 2 is constructed of the form for the plate, A being the recess for the plate, B B for the clip-arms, and C for the perch extension. The upper die, as seen in Fig. 3 inverted, is constructed the reverse of this, the letters thereon indicating the corresponding portions of the lower die. The plate of metal is placed onto the lower die, and the upper die, forced down thereon, cuts or forces the plate into or through the lower die, coming from the die finished in the form indicated.

I claim as my invention—

The dies shown in Figs. 2 and 3, constructed and operating as herein described.

Witnesses:

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