A. N. Clark,

Die for Felloe Plates.

No. 111,177. Patented Jan. 24, 1871.

Fig. 1.

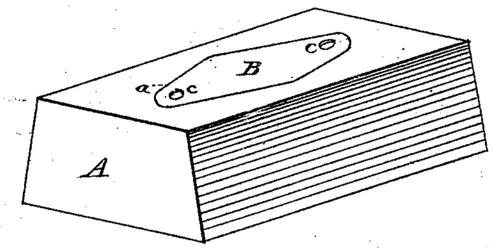


Fig. 2.

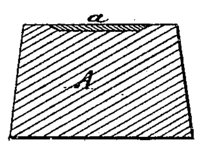


Fig. 3

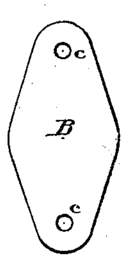


Fig. 4.

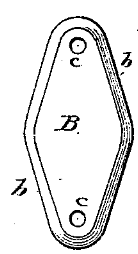
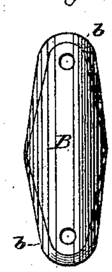


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

ALLISON N. CLARK, OF PLAINVILLE, CONNECTICUT.

IMPROVEMENT IN DIES FOR MAKING FELLY-PLATES.

Specification forming part of Letters Patent No. 111,177, dated January 24, 1871.

To all whom it may concern:

Be it known that I, A. N. CLARK, of Plainville, in the county of Hartford, and in the State of Connecticut, have invented certain new and useful Dies for Felly-Plates; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the die for thinning the edges of the felly-plate; Fig. 2, a vertical central cross-section of the same; Fig. 3, a plan view of the plate before the edges are thinned; Fig. 4, a plan view of the plate after its edges are thinned, and Fig. 5 a plan of the plate after it is bent and completed for use.

Like letters of like kinds denote like parts in each figure.

The nature of my invention relates to dies for thinning the edges of felly-plates for carriage-wheels; and it consists in the peculiar die employed for that purpose.

In the drawings, A represents the block, in the top center of which is a depression, *a*, of lozenge form with rounded extremities, the sides and ends beveling uniformly inwardly at an angle of about forty-five degrees either in straight or curved lines, and the bottom being upon a horizontal plane, the whole interior conformation corresponding precisely with the exterior of the plate presented in Fig. 4, or with edges a little curved.

B represents the felly-plate, having beveled, straight, or curved edges *b*, sloped at an angle of about forty-five degrees, and having at either end holes *c*, by which it is secured to the felly.

In the operation of my device the felly-plate is first cut out of suitable sheet metal, as shown in Fig. 3, and this blank placed upon the depression *a* in the block A, where it is forced into said depression by being subjected to pressure under a drop or between rolls, or in any other convenient method. After this pressure is applied to the blank, it will be found that its edges are beveled in correspondence with the interior shape of the depression. The plate is afterward finished, by means of suitable dies and swages, into the form shown in Fig. 5, when it is ready for use. The plate thus completed will have beveled, straight, or curved sharp edges on its outer side, and when placed in position on the wheel its edges will press closely to the felly.

The advantage of the die consists in the cheapness and uniformity with which the edges of the plate may be thinned, and the advantages of their thinned edges consists in their neatness of appearance, which is a matter of consequence in fine carriages, and in the close finish it secures between the edge of the plate and the felly, thus avoiding the danger of tearing off the plates, which frequently occurs in the crossing of railroad-tracks diagonally.

Having thus set out the nature, description, and merits of my invention, what I claim as new therein is—

For use jointly with a plain-faced drop or hammer, the die-block A, provided with the depression *a*, of the form and with the beveled or sloping margin herein described and shown.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of November, 1870.

ALLISON N. CLARK.

Witnesses:

H. S. CLARK,

GEO. D. CLARK.