

F. B. MORSE.

Improvement in Felly-Plates.

No. 128,558.

Patented July 2, 1872.

fig. 1

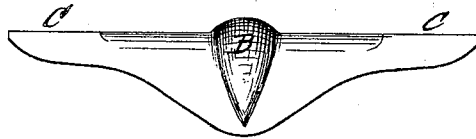


fig. 2.

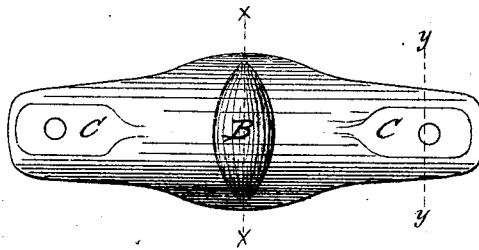


fig. 3.

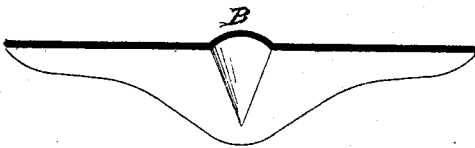


fig. 4.

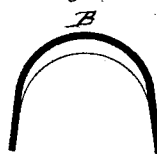
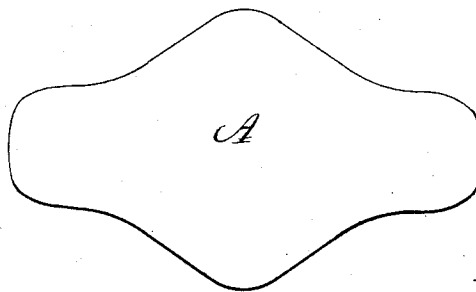


fig. 5.



fig. 6.



Witnesses.

J. H. Humway
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Inventor.

By his Atty.

John S. Earle

UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN FELLY-PLATES.

Specification forming part of Letters Patent No. 128,558, dated July 2, 1872.

To all whom it may concern:

Be it known that I, FRANCIS B. MORSE, of Plantsville, in the county of Hartford and State of Connecticut, have invented a new Improvement in Felly-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 side view; Fig. 2, a top view; Fig. 3, a longitudinal central section; Fig. 4, a transverse section on line *x x*; Fig. 5, a transverse section on line *y y*; and in Fig. 6, the blank from which the plate is formed.

This invention relates to an improvement in the article of manufacture known to the trade as felly-plates—that is to say, the plate which is placed upon the inside of the felly of a carriage-wheel to cover the joint, and through each end of which a bolt extends, securing the said plate to each part of the felly. Heretofore these plates have been forged, and various devices adopted to give the requisite strength and yet not mar the symmetry of the wheel, an object which in my present invention has been accomplished; and it consists in forming the plate from thin sheet metal, with a transverse corrugation to give to the plate the requisite strength.

From a blank, A, of thin sheet-steel or other suitable metal, cast into the form seen in Fig. 6, I form the plate. This form of the blank corresponds essentially with the blanks commonly used, but being very thin is not of sufficient strength to perform its office without some additional support. Heretofore these plates have been of sufficient thickness to give the required strength, which left an edge so thick as to materially mar the symmetry of the wheel. This thin blank I strike into the

form seen in Figs. 1 and 2. Transversely across the center I make a single corrugation, as at B, Fig. 3, the corrugation dying out near the extremes of the sides, as seen in Figs. 1 and 2. This strengthens the plate transversely, a transverse section being shown in Fig. 4, and when thus formed and corrugated the plate is transversely much stronger than a thicker plate would be. At the two ends I form a flat surface, C, which serves for the head of the bolt, a transverse section at this point shown in Fig. 5.

By this construction the edges of the blank are in no way affected, retaining the same degree of smoothness and regularity in which they come from the dies which cut them, and as the blanks are shaped cold no after-finish is required to be given to the plate to smooth its surface, hence I am enabled to produce a better plate and at much less cost than plates as heretofore constructed. Another advantage which this plate possesses over other constructions is worthy of mention. In putting together wheels of first-class work the joints of the felly are usually filled with white lead, which, as the wheel is compressed, is to a certain extent forced outward, and in the use of this plate the lead thus forced out will fill the cavity in the under side of the felly-plate over the joint, and thus more perfectly protect the joint, and this plate when attached to the wheel is so thin as to be scarcely perceptible, the corrugation presenting the appearance of a T-headed bolt.

I claim as my invention—

As an article of manufacture, the herein described felly-plate formed from sheet metal, having a transverse corrugation, substantially in the manner set forth.

Witnesses:

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