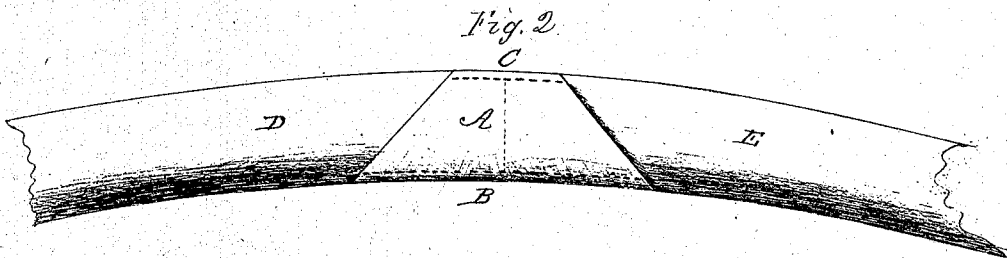
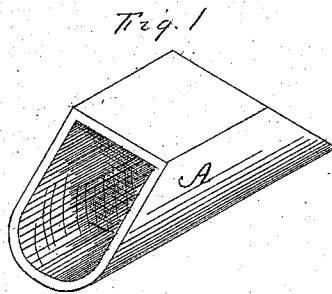


F. B. MORSE.  
Felly Plate for Wheels.

No. 103,273.

Patented May 17, 1870.



Witnesses.

J. H. Shumway  
a. j. Tibbits

H. D. Smith & Co  
Assignees of

F. B. Morse

Inventor.

By his Attorney

Wm. E. Earle

# United States Patent Office.

FRANCIS B. MORSE, OF PLANTSVILLE, CONNECTICUT, ASSIGNOR TO HIMSELF AND H. D. SMITH & CO., OF SAME PLACE.

Letters Patent No. 103,273, dated May 17, 1870; antedated May 12, 1870.

## IMPROVED FELLY-PLATE FOR CARRIAGE-WHEELS.

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, FRANCIS B. MORSE, of Plantsville, in the county of Hartford and State of Connecticut, have invented a new Improvement in Felly-Plates for Carriages; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in—

Figure 1, a perspective view of the plate complete, as an article of manufacture, and in

Figure 2, its application to the felly.

This invention relates to an improvement in the plate or band for securing the meeting ends of carriage-wheel fellys; and consists in a band, formed to surround the felly at the meeting points, and so much longer, upon its inner than outer side, that a considerable angle will be formed across the face of the felly.

The usual felly-plate consists of a plate of metal placed upon the under side of the felly, through which and the felly, bolts or rivets are placed to secure the two ends.

Bands have been formed to extend entirely around the felly at the meeting points, but in such cases the band has been of even width, and the shoulder on the felly square across, so that, in use, the shoulder jams hard and square against the metal, and soon raises or indents the wood at the shoulder, occasioning a loosening of the plate, a difficulty which, by my inven-

tion, is entirely overcome, and the use of bolts or other security of the plate entirely avoided.

A is the felly-plate, formed, from thin metal, to entirely surround the felly at the meeting ends, its inner side, B, being so much longer than the outer side, C, that the ends of the plate form an angle of about forty-five degrees, more or less.

Into this band the two parts of the felly, D and E, are placed, a tenon being formed upon their ends, with shoulders corresponding to the angles of the plate, and the felly is finished flush with the surface of the plate, so that, when the wheel is finished, the appearance of the plate is entirely hidden, and this construction changes the bearing from a direct line from the upper to the lower side, so as to make the bearing farther from the meeting point of the lower side than upon the upper, the wheel is greatly strengthened, and, the shoulder being inclined, does not upset the wood or loosen the plate, as does a narrow band, the ends of which are a right angle, and the labor in applying this band or plate is no more than a band the ends of which are at a right angle.

I claim as my invention—

The herein-described felly-plate or band, as a new article of manufacture.

F. B. MORSE.

Witnesses:

JOHN H. SHUMWAY,  
A. J. TIBBITS.