

J. Snitzer.

Securing Felloes & Spokes to Wheels.

N^o 75314

Patented Mar. 10, 1868

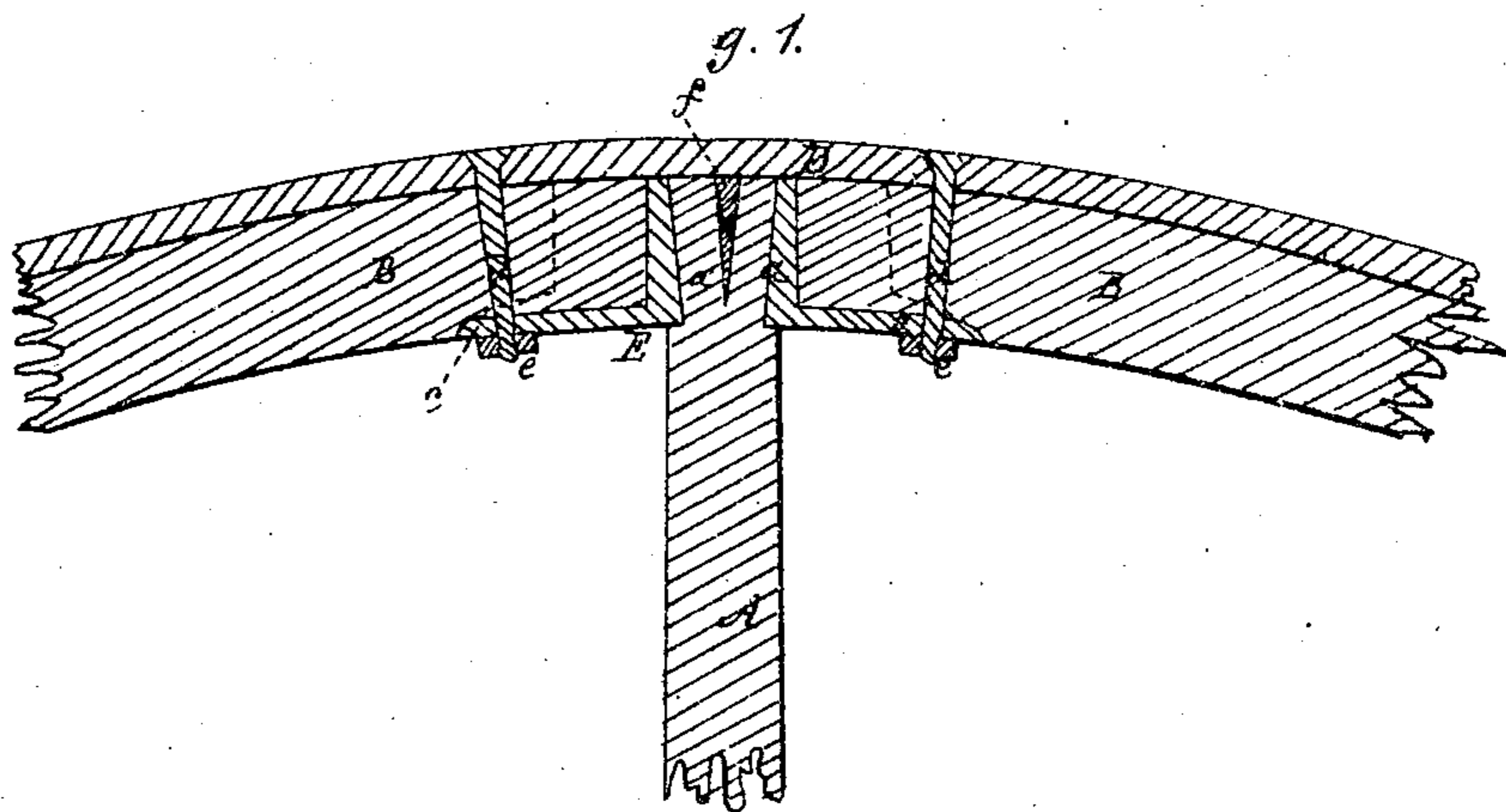
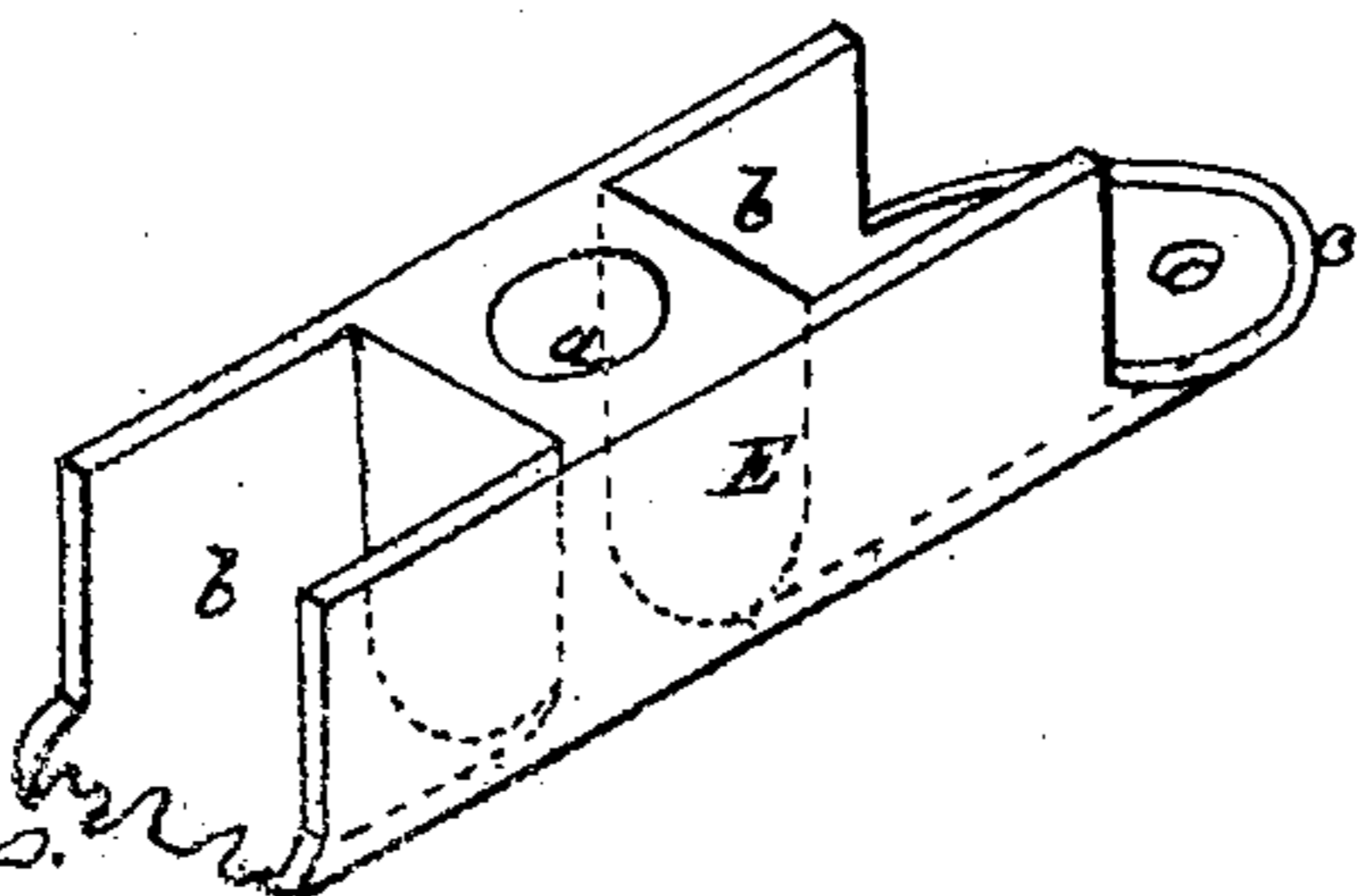


Fig. 2



Fig. 3



Witnesses

Edward Griffith
Edmund H. Newins

Inventor

John Snitzer

by his attorney

Fredrick Curtis

United States Patent Office.

JOHN SWITZER, OF LYNN, MASSACHUSETTS.

Letters Patent No. 75,314, dated March 10, 1868.

IMPROVED MODE OF SECURING THE ENDS OF FELLOES AND SPOKES IN CARRIAGE-WHEELS.

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

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, JOHN SWITZER, of Lynn, in the county of Essex, and State of Massachusetts, have invented a new and useful Improvement in the Mode of Securing the Ends of Felloes and Spokes in Carriage-Wheels; and do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawings, making part of this specification, and in which—

Figure 1 is a longitudinal section, and

Figure 2 a transverse and radial section of a portion of the wheel of an ordinary travelling-vehicle constructed in accordance with my invention.

Figure 3 is a perspective view of the metallic clasp or socket-plate, comprising the subject of my invention.

This invention is an improvement in that mode of connecting the ends of the felloes and the spokes in carriage-wheels, in which a metallic block or socket-plate is employed for receiving and securing the ends of the felloes, and two or more of the tenons of the spokes, the object of the invention being to provide greater security against separation of felloes and tire, or breaking away of parts, as well as to expedite the construction and finish of the wheel.

The invention consists in a metallic block or clasp, having a central tapering hole made through it for reception of the spoke-tenon, and with enclosures upon each end for reception of the ends of the felloes, the outer focus of such enclosures being open, and covered (as well as the outer end of the central hole) by the tire, when applied to them as hereinafter explained.

In the drawings above referred to, as making part of this specification, A denotes a portion or outer end of one spoke of an ordinary light pleasure-carriage wheel, and *a'* is its tenon, the adjacent ends of its two felloes being shown at B B, the tire of the wheel being shown at D. The socket-plate, to which reference has been made above, is shown at E as an elongated metallic block, having a tapering cylindrical hole, *a*, made centrally and radially through it, for reception of the spoke-tenon *a'*, the diameter of such hole, *a*, enlarging toward the outer end thereof. Two enclosures or partial sockets, *b b*, are formed within opposite ends of the block E, for reception of the ends of the felloes B B, a short lip, *c*, being formed upon each end of the inner face of the block, and extending beyond the enclosures *b b*, to overlap the ends of the felloes, as shown in fig. 1 of the drawings, a bolt, *d*, being extended through each lip, *c*, and the end of the felloes, and having a head counter-sunk within the tire, a nut, *e*, being screwed upon the inner end of the bolt to confine the whole together. A wedge, *f*, is to be driven into the outer end of the spoke-tenon *a'*, which has the effect of expanding such tenon within the socket *a*, and effectually preventing possibility of escape, or loosening of such tenon, the wedge itself being retained in place and prevented from starting by the tire D.

The object of making the hole *a* and the enclosures *b b* open to the outside of the block E, is to allow the spoke-tenon to be wedged, and the ends of the felloes to be more easily and perfectly fitted, and the "tread" or surface of the whole to be fitted or prepared for the tire in a much more expeditious and workmanlike manner than in the method before practised. A considerable portion of the wood of the felloe is also saved intact, which is not the case if the metal entirely surrounds it. The bolts *d d* confine the whole very securely together, and provide perfect security against separation of the felloes and tire.

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

The improved mode of fastening the ends of the felloes and the spokes in carriage-wheels, by means of the metallic block E, constructed and applied and secured by the bolts *d d*, as explained.

Witnesses:

FREDERICK CURTIS,

EDWARD GRIFFITH,

C. W. BALDWIN.

JOHN SWITZER.