

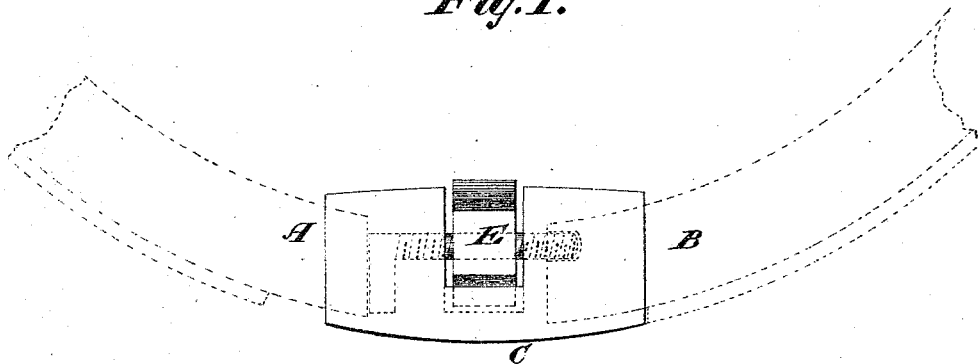
D. HITCHINGS.

Improvement in Modes of Expanding Wheels.

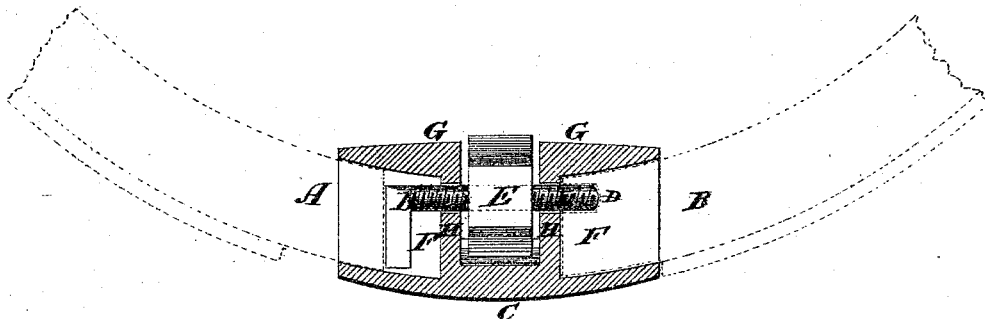
No. 115,611.

Patented June 6, 1871.

*Fig. 1.*



*Fig. 2.*



Witnesses:  
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# UNITED STATES PATENT OFFICE.

DANIEL HITCHINGS, OF LITCHFIELD, NEW YORK.

## IMPROVEMENT IN THE MODES OF EXPANDING WHEELS.

Specification forming part of Letters Patent No. 115,611, dated June 6, 1871.

Be it known that I, DANIEL HITCHINGS, of Litchfield, in the county of Herkimer and State of New York, have invented a new and useful Improvement in Expanding Wheels; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The object of my invention is improvement in that class of devices for expanding the fellys of wheels in which a double socket for receiving the ends of the fellys and a screw-bolt are employed; and the invention consists in so constructing a felly-socket that the nut on the screw-bolt shall be always and readily accessible without necessity for removal of a covering-plate or other device, and so that the outer part or side of the same shall form a part or continuation of the tire of the wheel, as hereinafter fully explained.

In the accompanying drawing, Figure 1 represents the double socket as applied to the felly, it being a side view. Fig. 2 is a side view, showing the sockets and screw-bolt in section and the mode of application.

Similar letters of reference indicate corresponding parts.

A and B are the ends of the felly. C is the

double socket. D is the screw-bolt. E is the nut on the bolt. The socket C may be made of either cast or wrought metal. F F are the sockets or chambers which receive the ends of the felly, the latter being seen in dotted lines. Between the sockets is an open slot or recess, G, in which the nut E works. The bolt D passes through orifices from one socket to the other, as seen in the drawing. The end of the bolt enters a hole in the end of the felly which bears against the bottom of the socket B, and the head of the bolt is made to bear against the other end of the felly in the socket A, as seen in Fig. 2. By turning the nut the bolt will be driven lengthwise. For expanding the felly the nut will bear against the back H of the socket B, which will force the head against the end A of the felly.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

As an article of manufacture, the socket C, having the end recesses F F, the transverse central recess G for containing the nut E, and the arched back, for forming a continuation of the tire, as shown and described.

DANIEL HITCHINGS.

Witnesses:

STEPHEN MATHEWS,  
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