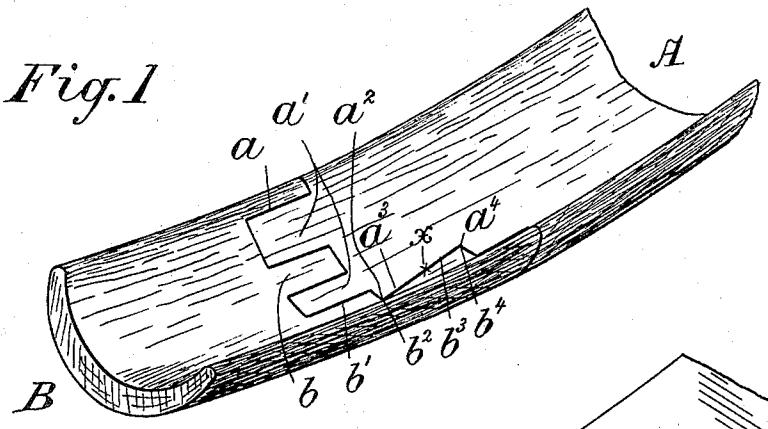
(No Model.)

G. TYLER.

WOODEN FELLY FOR VEHICLE WHEELS.

No. 584,277. Patented June 8, 1897.

Fig. 1



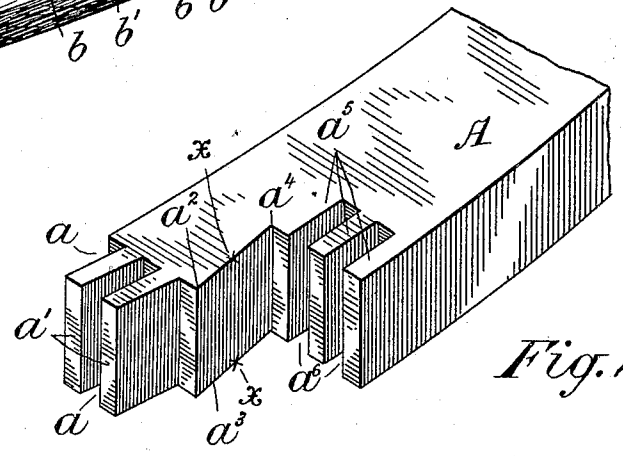


Fig. 2

Fig. 3

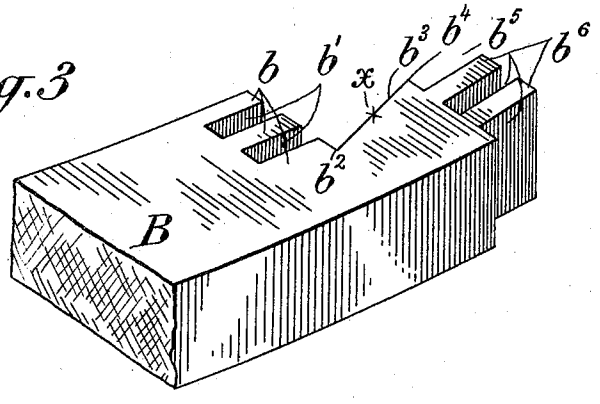
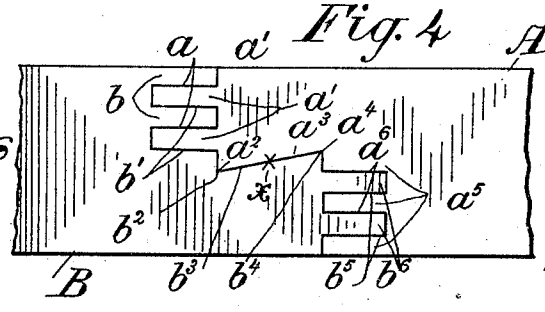


Fig. 4



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UNITED STATES PATENT OFFICE.

GEORGE TYLER, OF CLARKSBURG, CANADA.

WOODEN FELLY FOR VEHICLE-WHEELS.

SPECIFICATION forming part of Letters Patent No. 584,277, dated June 8, 1897.

Application filed November 4, 1896. Serial No. 611,076. (No model.) Patented in Canada December 7, 1896, No. 54,290.

To all whom it may concern:

Be it known that I, GEORGE TYLER, of the village of Clarksburg, in the county of Grey and Province of Ontario, in the Dominion of Canada, have invented a certain new and useful Improved Joint for the Wooden Fellies of Vehicle-Wheels, (for which I have obtained Letters Patent in Canada, No. 54,290, dated December 7, 1896;) and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of my invention is to produce a joint in the wooden felly of a bicycle or other vehicle wheel which shall be simple of construction, as well as strong and durable; but for full comprehension of the manner in which the joint is made reference must be had to the accompanying drawings and following description and claim.

For the purpose of illustration I have shown my invention applied to the felly of a bicycle-wheel, it being understood that the same may be employed in joining together the ends of the fellies of any vehicle-wheel.

In the said drawings, Figure 1 is a perspective view of a portion of the felly of a bicycle-wheel having the ends of same fitted together with my joint. Fig. 2 is a perspective view of a portion of same before being grooved to fit the tire, showing the formation of one half of my joint. Fig. 3 is a perspective view of a portion of same, showing the formation of the other half of the joint. Fig. 4 is a plan of the joint.

In the drawings similar letters of reference indicate like parts in the different figures.

A represents one end of the felly, and B the other end of same. In commencing to form the joint I cut out on the end A a number of grooves a, having between them the tongues a'. These tongues and grooves preferably run parallel with the sides of the felly, but may be slightly tapered, if found desirable. The point a^2 of the last inner groove a extends in beyond the center of the felly, which latter is indicated by the dot x, say to half the width of one of the grooves. From the point a^2 I make a cut in a diagonal direction, extending back through the center of the felly and past same until the point a^4 is reached. This point a^4 lies as far on the opposite side of the center x of the felly as the point a^2 extends on its side, and this diagonal cut a^3 forms one half of what I term the "locking" portion of my joint. From the point a^4 I cut another series of tongues a^5 and grooves a^6, also preferably running parallel with the edges of the felly and extending to the opposite side of same from which the grooves a and tongues a' are cut. The two series of tongues and grooves, together with the diagonal cut or locking portion a^3, comprise one half of the joint. (See Fig. 2.)

On the end B of the felly (see Fig. 3) I cut a number of tongues b, having between them the grooves b', until the point b^2 is reached. This point b^2 extends to a distance beyond the center x of the felly in the same manner as the point a^2, and from the point b^2 I again cut outward in a diagonal direction, passing through the center x and beyond same till I reach the point b^4, thus forming another diagonal or locking portion b^3, which corresponds to the locking portion a^3. From b^4 I cut another series of grooves b^5 and tongues b^6, which extend to the opposite edge of the felly from which the tongues b and grooves b' were cut. These last two series of tongues and grooves, together with the locking portion b^3, comprise the remaining half of my joint.

The putting together of the joint is accomplished by first giving the edges of the tongues, grooves, and locking portions a coating of glue and then bringing the ends A and B together, so that the tongues a' and tongues a^5 come over the grooves b' and grooves b^5 and the tongues b and b^6 come over the grooves a and a^6 and the diagonal or locking portions a^3 and b^3 coincide with each other. The two ends A and B are now pressed or hammered, so that the different tongues, grooves, and locking portions enter into their respective places and the jointing of the two ends is finished. The two series of tongues and grooves in each of the ends A and B prevent all danger of the felly spreading in a cross direction, while the diagonal or locking portions a^3 and b^3 prevent same spreading longitudinally, and when the spokes and tires are in position they remove any danger of the outward or inward separation of the joint, and by these means a very strong and simply-constructed joint is formed.

I wish it to be distinctly understood that I do not limit myself to the number of tongues and grooves in the joint, nor to the running of same parallel with the edges of the felly, nor to the placing of the locking portions so that they cut the center of the felly at the middle of their length; but

What I do claim, and desire to secure by Letters Patent, is as follows:

In a joint for the wooden fellies of vehicle-wheels, the combination of the grooves a and grooves a^6, in one end of the felly, of the tongues b and b^6 on the other end, of the two locking portions a^3 and b^3, and of the tongues a' and a^5, and the corresponding grooves b' and b^5, all arranged and put together in substantially the manner specified.

Toronto, September 12, 1896.

GEORGE TYLER.

Witnesses:

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