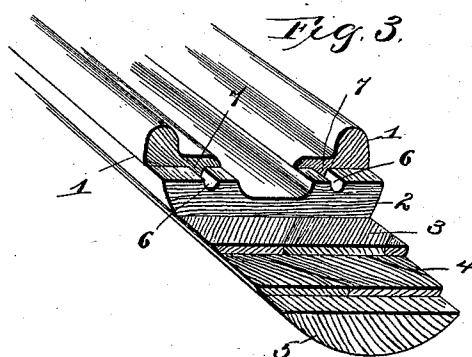
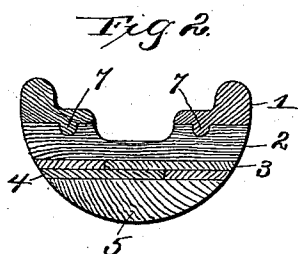
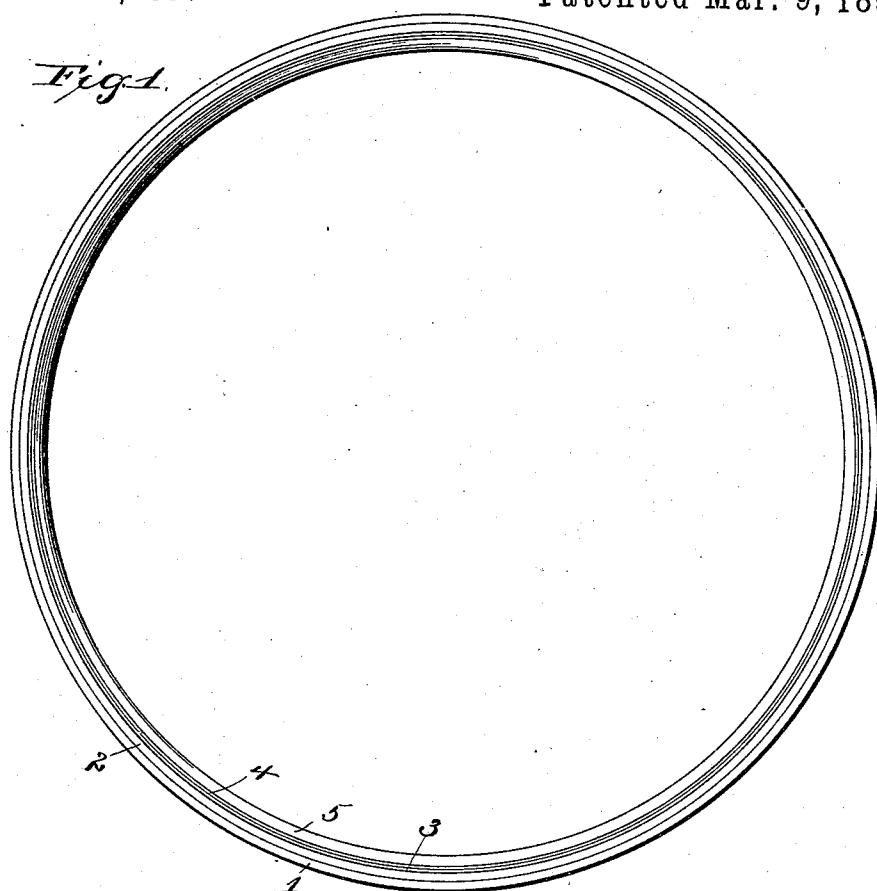


(No Model.)

W. DE LANY.
VEHICLE WHEEL RIM.

No. 578,392.

Patented Mar. 9, 1897.



Witnesses
E. W. Widenman
S. Williamson

Inventor
William De Lany
By *Geo. H. Holgate*
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM DE LANY, OF COBOURG, CANADA.

VEHICLE-WHEEL RIM.

SPECIFICATION forming part of Letters Patent No. 578,392, dated March 9, 1897.

Application filed November 19, 1895. Serial No. 569,380. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DE LANY, a subject of the Queen of England, residing at Cobourg, in the county of Northumberland, Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Vehicle-Wheel Rims, of which the following is a full, clear, and exact specification.

My invention relates to the making of a wooden rim for a bicycle or other vehicle wheel in such a manner as to prevent the rim from splitting. The rim is not a solid piece of wood, but is built up of different layers of wood, as hereinafter described.

Referring to the drawings, Figure 1 represents a completed rim for a bicycle-wheel made in accordance with my improvement; Fig. 2, a cross-section, and Fig. 3 is a detailed broken-away perspective of the manner in which the several layers of wood are arranged relative to each other in forming a rim.

Similar numbers denote like parts in the views of the drawings.

1, 2, 3, 4, and 5 represent the different layers of wood, one over the other, and fastened together with any waterproof cement. There may be any number of these layers of wood in the construction of the rim. Also different kinds of wood may be used.

2 shows a layer of wood with the grain thereof running lengthwise around the rim, and 3 shows a layer of wood the grain of which runs diagonally across the rim.

4 also shows a layer of wood the grain of which runs diagonally at right angles to the grain of the layer 3, and the layer 5 has its grain running in the same direction as the layer 2. One or more layers may be interposed between these already described which run directly crosswise of the rim, thus adding further strength to sidewise resistance.

When one cross-section is used in the construction, I prefer to have the grain run directly across the rim at right angles, and when two cross-sections are used in the construction of the rim I prefer to have the grain of the wood run at the angles shown in the layers 3 and 4.

The layer 2 is provided with grooves 6,

adapted to receive the tongues 7 of the strips 1, and these strips, by the means of these grooves, are more securely fastened to the layer 2 against sidewise displacement, and this is necessary, since the strips are not connected at their base and as the greatest side strain upon the rim comes upon these strips. The grain in each of these strips 1 runs diagonally across the section thereof from top to bottom inwardly, as clearly shown in Figs. 2 and 3, and as the grain in the layer 5 runs lengthwise it will be seen that all the strips will be firmly bound together when in the circular form of a rim and prevented from cracking or splitting, strength being thus added to each other.

By building up the rim of a number of layers, as shown, of different kinds of woods, the grains of which run at different angles to each other, it will be seen that a very durable and light rim is provided at a cost but little in excess of a rim composed of a single piece of wood.

One of the principal features of my improvement is that I do not depend upon the natural grain of the wood in forming the strips of which the rim is composed, but cut the strips at the desired angle from sheets.

Having thus fully described my invention, what I claim as new and useful is—

1. In a wheel-rim, a circular strip having grooves and a wooden flange-strip on either side having a bead adapted to fit in one of the grooves, the grain in the flange-strips being so disposed that it will run from the outer edge downward toward the center, as and for the purpose described.

2. In a device of the character described, a rim composed of a layer 5, having its grain running lengthwise, a layer of strips 4 having the grain running diagonally to that of layer 5, a second layer of strips 3 with their grain at right angles to that of layer 4, a layer 2 having its grain lengthwise and provided with grooves and flange-strips 1, having beads to fit in the grooves of layer 2, and running from its outer edge downward toward the center, as and for the purpose described.

3. A vehicle-wheel rim, comprising a circular strip of wood having a groove in either

side thereof, and two flange-strips, each having a tongue adapted to fit into a groove in the circular strip, said flange-strips having the grain of the wood disposed radially and inclining inwardly toward the center of the longitudinal axis of the wheel, for the purpose described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

WILLIAM DE LANY.

Witnesses:

H. F. HOLLAND,

WM. DE LANY, Jr.