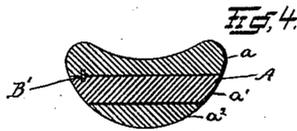
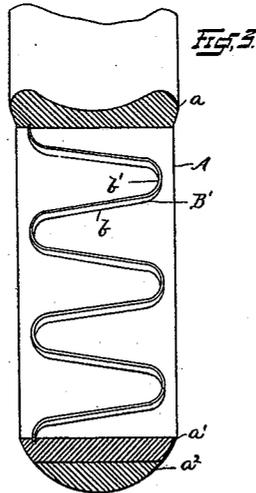
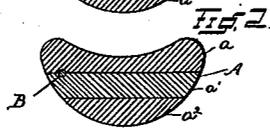
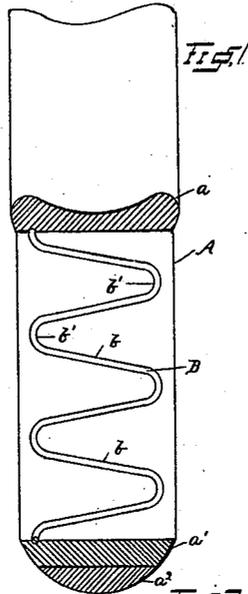


(No Model.)

J. G. MOOMY.  
WHEEL RIM.

No. 549,928.

Patented Nov. 19, 1895.



Witnesses  
W. M. ...  
H. C. ...

Inventor  
Joseph J. Moomy.  
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# UNITED STATES PATENT OFFICE.

JOSEPH G. MOOMY, OF ERIE, PENNSYLVANIA, ASSIGNOR TO MARY H. MOOMY, OF SAME PLACE.

## WHEEL-RIM.

SPECIFICATION forming part of Letters Patent No. 549,928, dated November 19, 1895.

Application filed February 26, 1894. Serial No. 501,554. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH G. MOOMY, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Wheel-Rims; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same

This invention relates to wheel-rims, and especially to wheel-rims to be used with pneumatic tires; and it consists in certain improvements in the construction thereof, as will be hereinafter fully described, and pointed out in the claims.

The invention is illustrated in the accompanying drawings, as follows:

Figure 1 shows a fragment of a multiple-ply rim, partly in section and partly in elevation, the different plies being on different lines of section to show construction. Fig. 2 is a transverse section of the rim shown in Fig. 1. Fig. 3 is a view similar to Fig. 1, but showing a slightly-different strengthening means. Fig. 4 is a transverse section of the rim shown in Fig. 3.

A marks the rim;  $a$ ,  $a'$ , and  $a^2$  the different plies of the rim, the rims shown being multiple-ply rims.

Wooden rims have been found to be preferable to metal rims in many respects and are now going into quite general use. The principal difficulty experienced is their tendency to split, and it has been the study of inventors in this line to provide a means of overcoming this defect, and rims have been made of multiple ply with the grain of the different plies in different directions, with canvass between the plies, with a solid metal strip as one of the plies, &c. Where the grain of the different plies are run in different directions a part of the longitudinal elasticity of the rim is sacrificed, and it is this longitudinal elasticity incident to the straight-grained wooden rim that forms one of the most desirable qualities inherent in it. Where canvas or solid metal strips are used the wood of the different plies is not brought together, and it is impossible to get as close a union as when the wood itself of the different plies is brought into immediate contact.

To provide a means to prevent the splitting of rims is the primary object of my invention.

Specifically my invention consists in providing a strengthening means which may be interposed between the different plies of a multiple-ply rim without preventing the immediate contact of the material forming the different plies, and which at the same time does not interfere with the natural elasticity or other desirable qualities of the wood, and in the accompanying drawings I have shown my invention in connection with a multiple-ply rim.

The features of my invention may be stated in their order as follows: The placing wire or metal strips across the grain, the wire or strips being small enough that the material of the different plies may be pressed over them into contact, turning the ends of the wires or strips or connecting them with longitudinal wires or strips to prevent the material of the plies from slipping on the cross wires or strips, connecting the cross wires or strips longitudinally so that they can be more readily handled and put in place, and pressing the material of the different plies over these wires or strips into contact.

In Fig. 1 all the above-enumerated features are attained by the use of the corrugated wire B. The parts  $b$  form the cross-wires,  $b'$  the turns at the ends or the longitudinal wires, which are connected, forming a continuous piece which can be readily put in place. It will be readily seen that when the different plies are put under pressure to bring them together, which is done in gluing, the wire is embedded in the plies and the different plies come into immediate contact, and the turns  $b'$  prevent the plies from slipping on the wire. This construction so strengthens the rim as to make it next to impossible to split it, is light, and does not interfere with the elasticity of the rim.

In Figs. 3 and 4 the wire B' is shown as flat and turned up on edge, so as to be more readily and deeply embedded in the plies.

In building the rim the wires are placed between the plies and the rim subjected to sufficient pressure to embed the wire into the plies and to bring the plies into immediate contact.

What I claim as new is—

1. The combination with a wooden rim; of cross wires attached to said rim; and longitudinal wires formed by bending the cross wires and which connect said cross wires, said longitudinal and cross wires forming a continuous corrugated wire for the purposes set forth.

2. The combination with a multiple ply rim; of cross wires therein between the plies; and longitudinal wires formed integrally with the cross wires.

3. The combination with a multiple ply rim; of cross wires therein between the plies and longitudinal wires connecting said cross wires which are formed by bending said cross wires,

said longitudinal and cross wires forming a continuous corrugated wire.

4. The combination with a multiple ply rim; of flat cross wires set on edge between the plies; and flat longitudinal wires connecting said cross wires which are formed by bending said cross wires, said longitudinal and cross wires forming a continuous corrugated wire.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH G. MOOMY.

Witnesses:

L. E. TORRY,  
H. C. LORD.