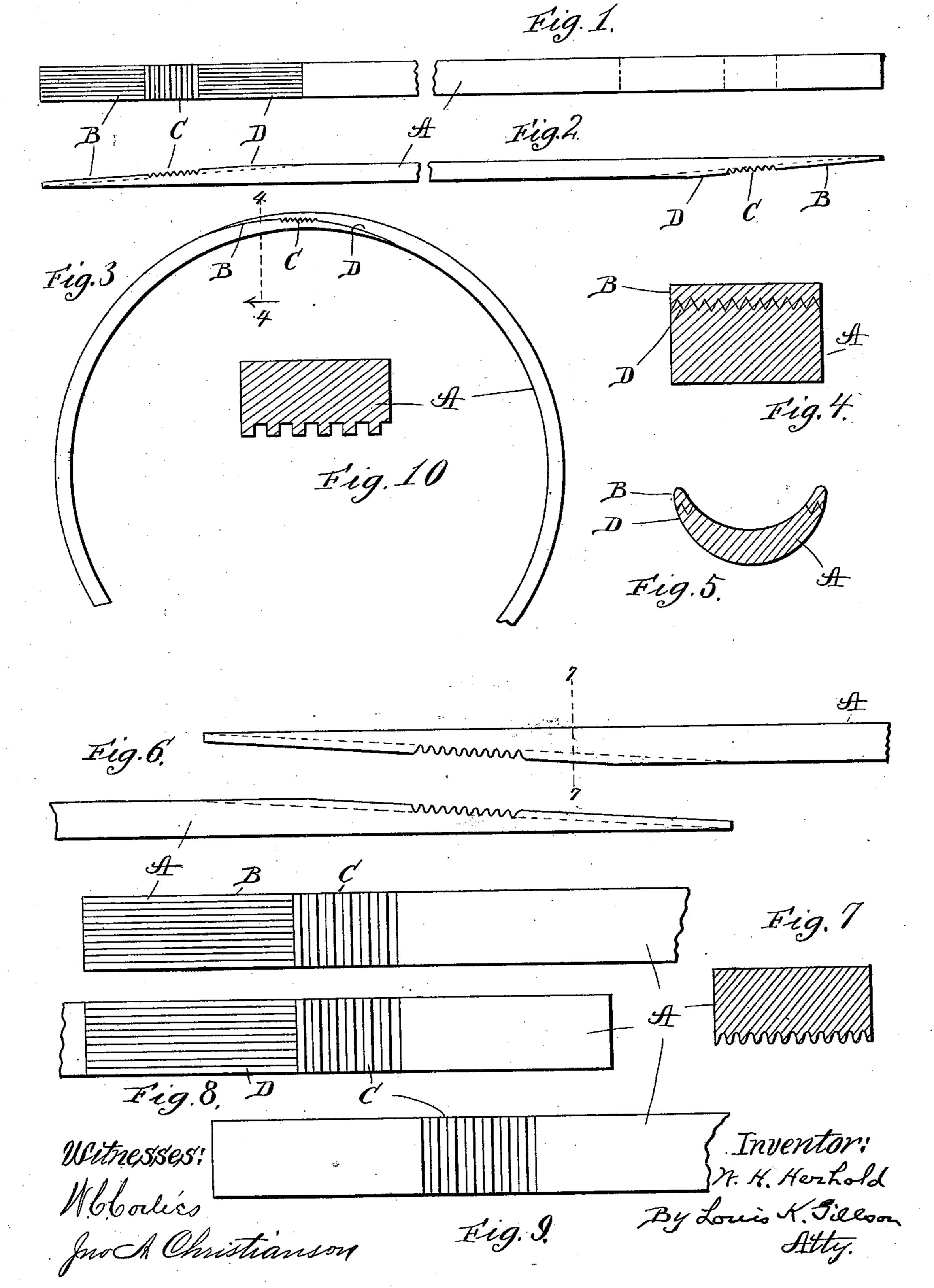
## W. H. HERHOLD. WOOD RIM FOR CYCLES.

No. 561,166.

Patented June 2, 1896.



## United States Patent Office.

WILLIAM H. HERHOLD, OF CHICAGO, ILLINOIS.

## WOOD RIM FOR CYCLES.

SPECIFICATION forming part of Letters Patent No. 561,166, dated June 2, 1896.

Application filed August 6, 1895. Serial No. 558,367. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HERHOLD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wood Rims for Cycles; 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, reference being made to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of the invention is to so join the meeting ends of the continuous piece of which the rim is formed that the cement is relieved of any sliding strain, while a complicated form of joint is avoided. My improved joint is a simple splice or scarf with the meeting faces grooved transversely and longitudi-

nally.

In the drawings I show in Figure 1 a plan view of the strip of which the rim is formed, the ends being prepared for joining. Fig. 2 is an edge view of the same. Fig. 3 is an edge view of the rim after the joint is made. Fig. 4 is a cross-section in the line 4 4 of Fig. 3. Fig. 5 is the same view, the rim having been completed. Figs. 6 to 10 show various modifications in the form of the joint, Fig. 7 being on the line 7.7 of Fig. 6

ing on the line 7 7 of Fig. 6.

The strain upon a cycle-rim of modern form, the spokes being of wire and consequently under great tension, is central, tending to contract the rim. A simple form of scarfed joint in which reliance is placed solely upon the cement to prevent the contact-faces sliding the one upon the other is difficult to maintain, the parts having a tendency to creep. Such a joint is, however, much simpler of construction than a mortised joint, and in that it is less liable to start a fracture of the material is the best form but for the objection mentioned.

I prepare the strip A of which the rim is formed by obliquely scarfing its ends upon opposite sides, as plainly shown in Fig. 2, and then channeling or corrugating the scarfed surface with numerous grooves, both trans- 50 verse and longitudinal, as indicated at CBD. These grooves, whether transverse or longitudinal, may be V-shaped in cross-section, as shown in Fig. 4, or regularly curved, as shown in Figs. 6 and 7, or they may be square in 55 cross-section, as shown in Fig. 10. The strip A being bent to a circle the transverse grooves C C come into coöperation and the sections B of the longitudinal grooving coöperate with the sections D.

The tendency of the rim to contract in diameter by reason of the great strain of the spokes is resisted by the central section of transverse grooves, while the longitudinal grooves at the extreme end of the piece of 65 which the rim is formed prevent the joint from breaking laterally by securely holding the parts where they must first separate in

the event of such fracture.

I am aware that rims have been made with 70 a scarfed joint and also that such a joint has been longitudinally grooved to prevent lateral displacement, and I do not broadly claim such forms.

What I claim as my invention, and desire 75

protection in, is—

A wood cycle-rim formed of a continuous piece bent to a circle and having its ends united by an oblique scarfed joint, a portion of each of the scarfed surfaces having a series of corresponding transverse grooves and a portion thereof having a series of corresponding longitudinal grooves, substantially as described and for the purpose stated.

In testimony whereof I have affixed my sig- 85 nature in the presence of two witnesses.

WILLIAM H. HERHOLD. Witnesses:

Louis K. Gillson, W. C. Corlies.