

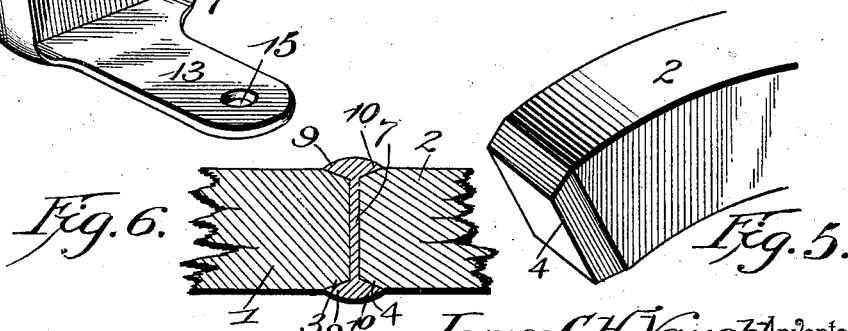
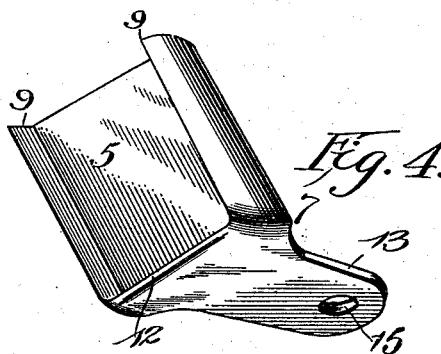
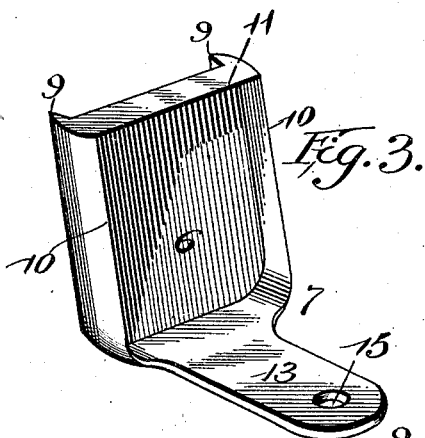
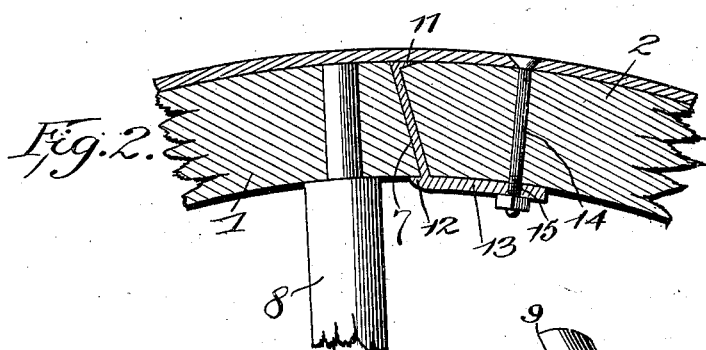
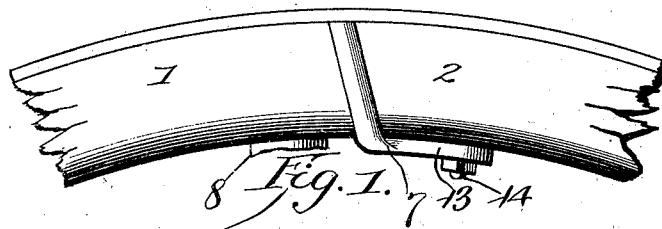
No. 647,054.

Patented Apr. 10, 1900.

J. C. H. VAUGHT.
FELLY BRACE.

(Application filed Aug. 15, 1899.)

(No Model.)



Witnesses

A. H. Appleman
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UNITED STATES PATENT OFFICE.

JAMES C. H. VAUGHT, OF PHILLIPSBURG, MONTANA.

FELLY-BRACE.

SPECIFICATION forming part of Letters Patent No. 647,054, dated April 10, 1900.

Application filed August 15, 1899. Serial No. 727,338. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. H. VAUGHT, a citizen of the United States, residing at Phillipsburg, in the county of Granite and State of Montana, have invented a new and useful Felly-Brace, of which the following is a specification.

The invention relates to improvements in felly-braces.

10 The object of the present invention is to improve the construction of felly-braces and to provide a simple, inexpensive, and efficient device adapted to be readily applied to the rim of a wheel and capable of supporting the said rim at the joints of the felly-sections and of effectually preventing the same from splitting off or breaking down and causing the wheel to flatten at such points, whereby the durability of a wooden vehicle-wheel will be greatly increased.

20 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

25 In the drawings, Figure 1 is an elevation of a portion of a wheel provided with a felly-brace constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the rim. Fig. 3 and 4 are detail perspective views of the brace. Fig. 5 is a similar view of one end of one of the felly-sections. Fig. 6 is a horizontal sectional view.

35 Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 and 2 designate felly-sections having their adjacent ends mitered or cut at an angle to the diameter of the wheel to provide an oblique joint, and the ends 3 and 4 are beveled to fit into sockets 5 and 6 of a felly-brace 7, which is interposed between the ends 3 and 4 of the felly-sections, as clearly shown in Figs. 1 and 2 of the accompanying drawings. The section 1 of the felly is supported by the adjacent spoke 8, and it is beveled at opposite sides to fit the side flanges 9 of the socket 5, which is open at the top, as it is impossible for the end 3 of the felly-section 1 to move inward owing to the support afforded by the spoke, and the oblique joint which is arranged

at an acute angle to the spoke 8 causes the end 4 to overlap the supported end 3.

The end 4 of the felly-section 2 is beveled at the outer and side edges, as clearly shown in Fig. 5 of the accompanying drawings, and the side and outer flanges 10 and 11 of the socket 6 are correspondingly beveled at their inner faces to fit the beveled edges of the felly-section 2. The section and the socket may be provided with any degree of beveling, and the outer faces of the sides of the socket may be arranged strictly flush with the side faces of the felly-sections, if desired.

The socket 5 is provided with an inner transverse flange 12, and the inner transverse flange of the socket 6 is extended to form an arm 13, arranged at an obtuse angle to the oblique joint and extending along and fitting against the inner face of the felly-section 2 and secured to the same by a tire-bolt 14. The arm 13, which supports the felly-section 2, is provided with a perforation 15, registering with that of the felly-section 2 and receiving the tire-bolt.

75 The invention has the following advantages: The felly-brace, which is exceedingly simple and inexpensive in construction and which possesses great strength and durability, is arranged at an angle to the diameter of the wheel, and it forms an oblique joint and causes the felly-sections to overlap, whereby they are firmly supported. It interlocks the sections of the felly and prevents the ends from splitting off, and the end 4, which is not supported by a spoke, overlaps the end 3, which is directly supported by the spoke 8, whereby the said end 4 may be firmly held against inward movement. The device will prevent a joint from giving way, and it will be impossible for the rim and tire to flatten at such point, and the said device also serves to exclude moisture from the joint.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. In a device of the class described, the combination with the felly-sections 1 and 2 having their adjacent ends mitered or cut at

an angle to the diameter of the wheel to form an oblique joint, and a spoke supporting the section 1, of the felly-brace provided with sockets 5 and 6, receiving the ends of the sections 1 and 2, and arranged at an acute angle to the said spoke, the socket 5 being open at the outer end, and the socket 6 having its inner end extending and forming an arm 7, arranged at the inner face of the section 2, and secured to the same by a tire-bolt, substantially as described.

2. In a device of the class described a felly-brace designed to be arranged at a point between the spokes of a wheel and provided with the sockets 5 and 6 adapted to receive

the adjacent ends of the felly-sections, the socket 5 being open at its outer end and the socket 6 having continuous walls to extend entirely around the end of the contiguous felly-section, and provided with a longitudinal arm 13 projecting from the inner end of the socket and extending along the adjacent felly-section, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES C. H. VAUGHT.

Witnesses:

J. ROSS COLHOUN,
M. PERRY HAHN.