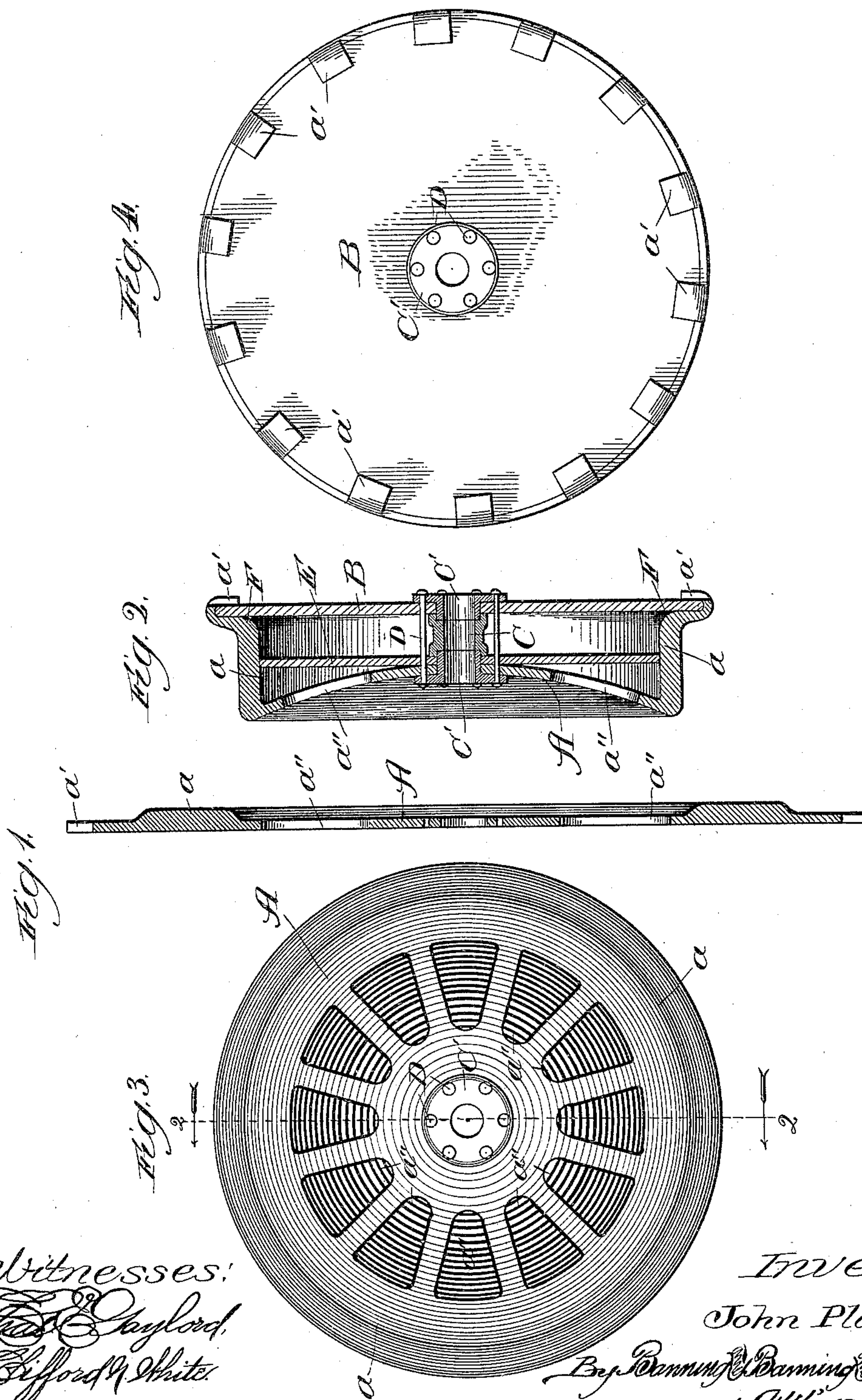


(No Model.)

J. PLAYER.  
CAR WHEEL.

No. 446,571.

Patented Feb. 17, 1891.



Witnesses:  
Edw. J. Gaylord,  
Clifford & White.

Inventor:  
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Attys.



# UNITED STATES PATENT OFFICE.

JOHN PLAYER, OF TOPEKA, KANSAS.

## CAR-WHEEL.

SPECIFICATION forming part of Letters Patent No. 446,571, dated February 17, 1891.

Application filed October 7, 1890. Serial No. 367,319. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN PLAYER, a citizen of the United States, residing at Topeka, Shawnee county, Kansas, have invented a new and useful Improvement in Car-Wheels, of which the following is a specification.

Cast-iron car-wheels are heavy and easily broken, and pressed-steel wheels such as have heretofore been used to obviate these defects are liable to wear out or bend in the tread. To prevent this is the object of my invention, and this object I accomplish by thickening the tread of the wheel, as hereinafter set forth.

In the drawings, Figure 1 is a central vertical section of the blank used to form part of the wheel; Fig. 2, a similar section of the completed wheel, taken on line 2 2 of Fig. 3, looking in the direction of the arrows; Fig. 3, an elevation of the left side of the wheel shown in Fig. 2, and Fig. 4 an elevation of the right side thereof.

A is one part of the wheel; B, the other; C C', the parts of the hub; D, the bolts that hold the hub together, and E a plate or disk.

In constructing my improved wheel, the part A is first made in the form of a circular steel or wrought-iron blank of suitable dimensions, as shown in Fig. 1. It is provided with openings *a'*, projections *a''*, and an annular thickened portion *a*. This thickened part of the blank is so placed as to form the tread of the wheel when complete. The blank is further provided with suitable holes to allow the hub and fastening-bolts to pass through it. The blank is then bent in a press or by other suitable means into the form shown in Fig. 2, the thickened part *a* being bent to form the tread and that part of the blank lying outside of this portion being bent to form a shoulder F. A circular steel or wrought-iron disk B is then made and placed inside the part A, rest-

ing against the shoulder F. The points *a'* at first stand at a proper angle to admit the disk and are then bent over upon it, as shown in Figs. 2 and 4, thereby locking the parts of the wheel together and holding the disk firmly in place.

The hub is made preferably in three parts, a flanged sleeve C and two flanged collars C', all fitting together, as shown, and held in place by rods or bolts D passing through the two parts of the wheel and the flanges on the collars C', and riveted, as shown. A supplemental disk E may be used, if desired, to aid in supporting the tread and to add strength to the wheel; but this is not an essential part of my invention, which principally consists in thickening the tread of the wheel, as shown.

As will be obvious, a wheel thus made will be strong and durable, not bending or easily wearing through in the tread. The tread is supported, as shown, by means of its attachment to the disk B by the concave side of the part A, and also by the supplemental disk when that is used.

I claim—

1. In a car-wheel the combination of a part A, having a thickened portion *a*, forming the tread of the wheel, and a disk B, secured thereto, substantially as described.

2. A car-wheel comprising a part A, having a thickened portion *a*, forming the tread of the wheel, a disk B, secured therein, and a hub C C', substantially as described.

3. A car-wheel comprising the part A, having a thickened portion *a*, forming the tread of the wheel, the disk B, secured thereto, a hub C C', and a supplemental strengthening-disk E, substantially as described.

JOHN PLAYER.

Witnesses:

GEORGE S. PAYSON,  
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