E. P. KING.

CAR WHEEL.

APPLICATION FILED JAN. 26, 1911.

1,007,707. Patented Nov. 7, 1911.

Fig. 1.

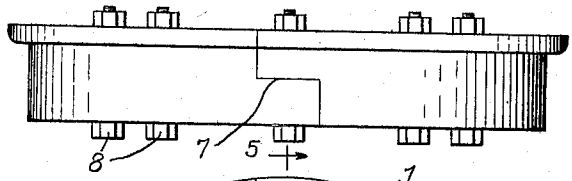


Fig. 2.

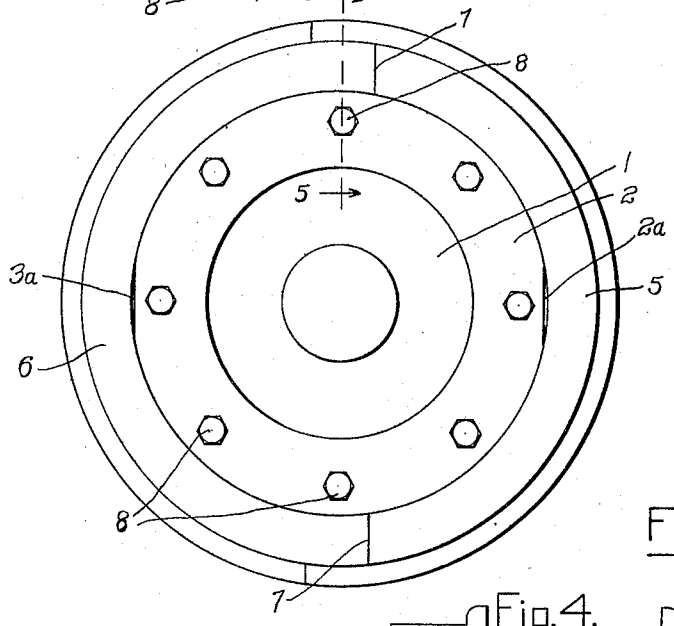


Fig. 3.

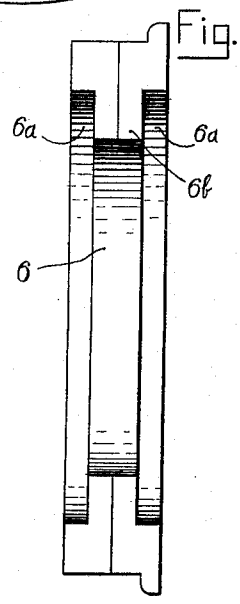


Fig. 4.

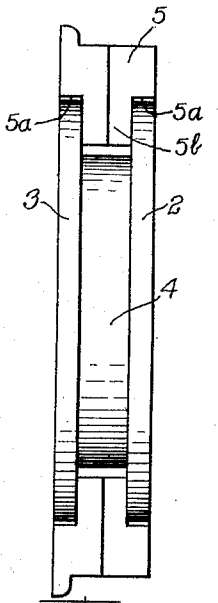
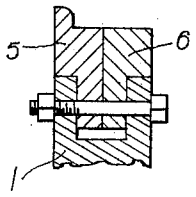


Fig. 5.



Witnesses

George C. Higham.

Leonard W. Novander

Inventor

Emmet P. King

By Brown & Williams

Attorneys

UNITED STATES PATENT OFFICE.

EMMET P. KING, OF CHICAGO, ILLINOIS.

CAR-WHEEL.

1,007,707. Specification of Letters Patent. Patented Nov. 7, 1911.

Application filed January 26, 1911. Serial No. 604,734.

To all whom it may concern:

Be it known that I, EMMET P. KING, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and Improved Car-Wheel, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention consists in an improved car wheel construction, by which the wearing portion of the wheel may be removed from the body portion and replaced when desired, as a result of which the body portion may be securely fastened to the axle and remain in place regardless of the number of wearing portions which are successively used on the wheel. The wearing portion is preferably so conformed that for its running position it is held in place upon the body portion regardless of the fastening means which it is desirable to use to secure the wearing portion to the body portion.

The several drawings illustrating my invention are as follows:

Figure 1 is an edge view of the wheel complete. Fig. 2 is a face view of the wheel shown in Fig. 1. Fig. 3 is an edge view of the body portion and half of the wearing portion in place thereon, while Fig. 4 is an edge view of the half wearing portion removed from the parts shown in Fig. 3. Fig. 5 is a detailed sectional view taken through one of the bolts used to secure the parts of the wheel together, such view being taken along the line 5—5 in Fig. 2.

Similar numerals refer to similar parts throughout the several views.

As shown in the drawings, the wheel consists of a circular body portion 1 comprising two end flanges 2 and 3 connected by an intermediate cylinder 4. The wearing portion of the wheel consists of the two half sections 5 and 6, provided with rabbets 5^a and 6^a to fit the flanges 2 and 3 of the body portion 4. The flanges 5^b and 6^b project inward from the wearing portions to fit between the flanges 2 and 3 formed on the body portion 4 of the wheel. The inner diameter of the flanges 5^b and 6^b is slightly greater than the outside diameter of the cylindrical portion 4. The ends of the sections 5 and 6 of the wearing portion of the wheel are mortised together, as indicated at 7 in Figs. 1 and 2; and as indicated in Fig. 2, each portion extends a short distance around the body portion beyond the diameter of the wheel, as a result of which the distance between the extreme ends of the wearing portions across the rabbets formed therein is somewhat less than the outside diameter of the flanges 2 and 3. To permit the assembly of the parts the flanges 2 and 3 are flattened, as indicated at 2^a and 3^a, the amount of flattening being sufficient so that the ends of the wearing portions 5 and 6 may be slipped over such flattened portions to bring the flanges 2 and 3 into proper position in the rabbets formed in the wearing portions. When the parts are thus assembled the body portion 1 is rotated relatively to the wearing portions and the several parts are secured together by means of bolts 8.

As a result of the construction described it will appear that the body portion 1 may be permanently secured to the car axle in any desired manner, as by forcing the parts together by hydraulic pressure, or by keys, or in any similar manner, and that when once assembled in place the body portion need not be removed from the axle to renew the wearing portions, as all that is necessary is to jack up the portion of the truck adjacent to the wheel to be renewed, to remove the old wearing portions, and place new wearing portions upon the wheel; and, furthermore, that this may be accomplished without removing the axle from its bearings. The wheel constructed as described is, it will be observed, held together not only by the securing bolts, but also by the conformation of the parts, so that their displacement relatively to each other is prevented by the conformation of the parts themselves, which provides against the working of the parts upon each other to produce bad joints between the ends of the wearing portions.

By means of my invention the body portion of the wheel may be constructed of cheap material, as cast iron, while the wearing portions may be constructed of material as steel, adapted to resist wear to the best advantage, and furthermore, the wearing portions may be constructed in any desired manner, so that the material will have the maximum wear resisting qualities and at the same time be constructed in as cheap a manner as possible. The wearing portions may be constructed by rolling the parts to the

shape required, or by means of suitable dies, or in any desired manner that may be found practical in the construction of such parts.

While I have shown my invention in the particular embodiment herein disclosed, I do not, however, limit myself to this exact construction, but may employ any mechanical equivalent thereof.

What I claim is:

1. A car wheel comprising a circular body portion, and two wearing portions fitted to the body portion and overlapping at their ends so that each is in contact with more than half of the circumference of the body portion.

2. A car wheel comprising a circular body portion, and two wearing portions fitted to the body portion and mortised together at their ends and each extending more than half-way around the body portion, such body portion being flattened at opposite points to permit the assembly and removal of the wearing portions.

3. A car wheel comprising a circular body portion, two wearing portions fitted to the body portion and mortised together at their ends and each extending more than half-way around the body portion, such body portion being flattened at opposite points to permit the assembly and removal of the wearing portions, and means for securing the wearing portions and body portion together.

4. A car wheel comprising a body portion, and a single tire consisting in two wearing portions each in contact with more than half of the supporting perimeter of the body portion.

5. A car wheel comprising a body portion having two circular end flanges connected together by a cylindrical portion of smaller diameter, and two wearing portions extending between the flanges and fitting their outer surfaces, such wearing portions each extending more than half-way around the flanges.

6. A car wheel comprising a body portion having two circular end flanges connected together by a cylindrical portion of smaller diameter, two wearing portions extending between the flanges and fitting their outer surfaces, such wearing portions each extending more than half-way around the flanges, and bolts for securing the parts together to prevent turning of the body portion relatively to the wearing portions.

7. A car wheel comprising a body portion having two circular end flanges connected together by a cylindrical portion of smaller diameter, two wearing portions extending between the flanges and fitting their outer surfaces, such wearing portions each extending more than half-way around the flanges, and bolts for securing the parts together to prevent turning of the body portion relatively to the wearing portions, such flanges being flattened at opposite points.

In witness whereof, I hereunto subscribe my name this 23rd day of January, A. D., 1911.

EMMET P. KING.

Witnesses:
GEO. P. JOHNSON,
ALBERT C. BELL.