(No Model.)

W. HOOVER.

CAR WHEEL.

No. 302,203. Patented July 15, 1884.

Fig. 1.

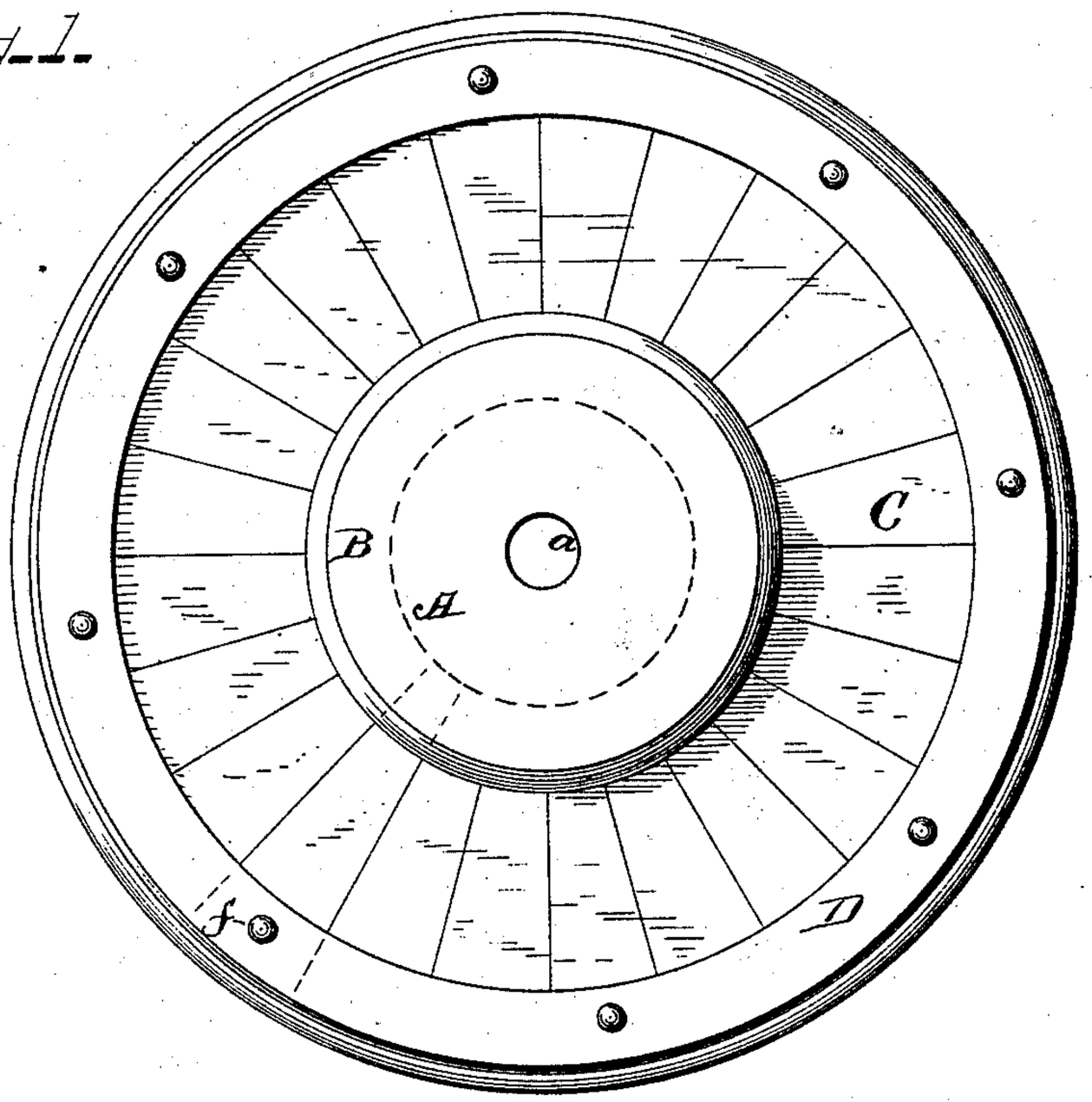


Fig. 2.

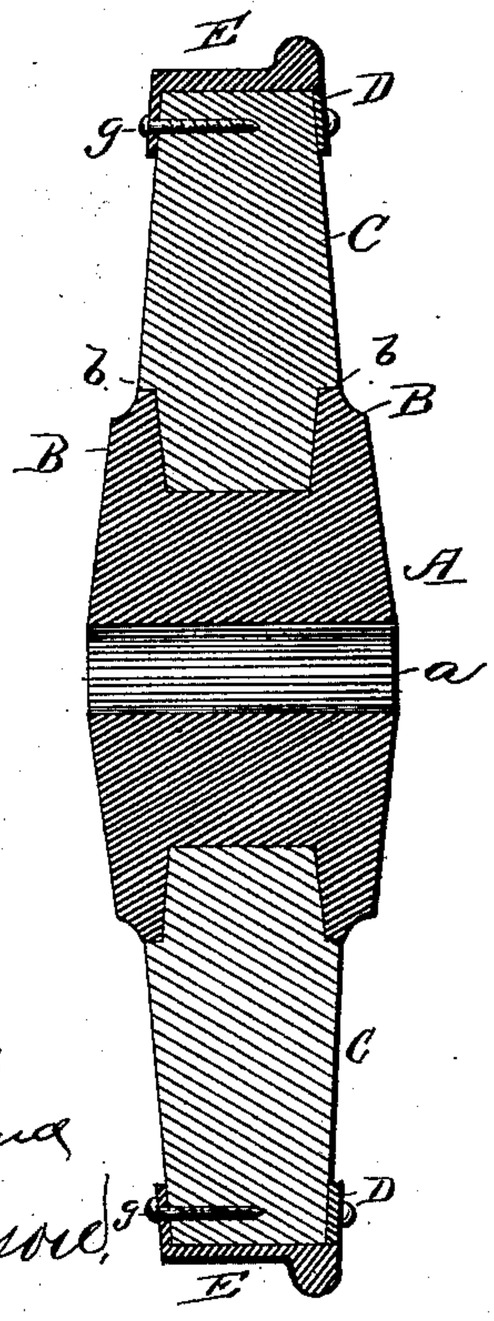
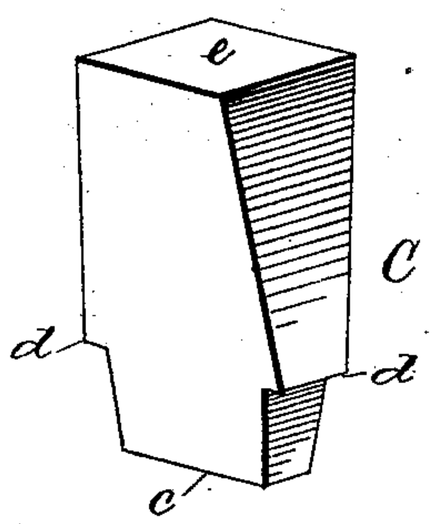


Fig. 3.



WITNESSES

F. L. Ourand

E. W. Johnson

William Hoover
INVENTOR

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM HOOVER, OF SALT RIVER, MICHIGAN.

CAR-WHEEL.

SPECIFICATION forming part of Letters Patent No. 302,203, dated July 15, 1884.

Application filed March 27, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HOOVER, a citizen of the United States of America, residing at Salt River, in the county of Isabella and State of Michigan, have invented certain new and useful Improvements in Car-Wheels; 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 had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention has reference to car-wheels; and it consists in the improvements hereinafter fully described and set forth.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view of a wheel constructed in accordance with my invention. Fig. 2 is a central vertical section of Fig. 1, and Fig. 3 is a detail view.

A represents the hub of the wheel, which is provided with a central perforation, *a*, for the passage of the axle-spindle. The said hub A is provided peripherally with two flanges, B, which are so arranged relatively to each other as to form between them an annular depression which contracts gradually from the top toward the bottom. Each flange B is flattened at the top to present an annular shoulder or seat, *b*. A series of blocks or wood sections, C, Fig. 3, are decreased toward the bottom, and are cut away at their lower portion to form a tongue, *c*, and shoulders or offsets *d*. The upper face, *e*, of each block is curved, as shown clearly in Fig. 3. The said blocks C are arranged in the wheel, as shown clearly in Figs. 1 and 2, so that the tongues *c* rest in the contracted depression between the flanges B, while the offsets *d* of said blocks C rest on the annular seats *b*, afforded by the top of the flanges B. The width and proportion of the numerous blocks are such that the said blocks fit snugly in position and constitute a practical body for the wheel. A ring or band, D, rests against the inner faces of the blocks C, near the periphery of the same, and retains the said blocks C in position on the inner side of the wheel by means of bolts or other fastening devices, which pierce the said ring D and engage the blocks at intervals. The tread E of the wheel has the usual flange, F, at the inner side of the periphery of the wheel, the said tread being provided with a depending flange, G, which bears against the outer sides of the blocks C, and retains them in position at the front by means of bolts *g*, which engage blocks alternating with those the bolts *f* enter.

From the foregoing it will be apparent that a wheel constructed in accordance with my invention is cheap as well as durable, and that the several parts composing the same may be readily put together in forming the wheel. The contracted depression permits the tongues *c* to be snugly placed between the flanges B, while the provision of the annular seats *b* resists radial strain from the tread toward the hub.

By arranging the tread E and band D as described, the tread is secured at one side of the wheel—to wit, the outer side—the inward pressure on the flange F by the rail being sufficient to hold the tread in position. Further, by removing the bolts *g* of the tread, the blocks C not engaged by the bolts *f* may be readily withdrawn or tightened by means of other additional blocks being inserted.

I claim—

In a car-wheel, a solid metallic hub having annular side flanges forming a continuous wedge-shaped socket with straight upper edges, *b b*, the spokes C, tapered, as shown, and provided with shoulders *d d*, which rest upon the edges *b b* of the hub, said spokes having rounded ends *e*, a tire, E, with a perforated side flange formed integral therewith, and a ring, D, one side of which rests upon a projecting portion of the tire, and bolts *g* for securing the parts to each other, the parts being combined and organized as shown.

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

WILLIAM HOOVER.

Witnesses:

M. MURTHA,

ALFRED HOOVER.