

it may concern:

Know that I, PETER GENDRON, of the county of Lucas and State of Ohio, have invented a new and useful Improvement in Carriage-Wheels; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, and being a part of the said invention, in which—

Fig. 1 is a perspective view of my wheel.
Fig. 2 is a vertical longitudinal section through the wheel.
Fig. 3 is a plan view of one of the

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sections of the hub with the cap removed. Fig. 4 is a plan view of the inner face of the caps.

Like letters refer to like parts in each figure.

The nature of this invention relates to a new and peculiar construction of a carriage-wheel, so arranged as to be able with a lighter wheel to sustain a heavier load than can be imposed on wheels of ordinary construction. The weight of the load in the usual wheel is imposed upon the spokes, radiating from the lower part of the hub, when, if the spokes are too weak for the purpose, they buckle or break. In the construction of the wheel under consideration this difficulty is avoided, as the parts are so arranged that any excess of weight that might, under ordinary circumstances, be imposed on any particular spoke or spokes is at once distributed, so that the weight is equally imposed upon all parts of the wheel. The invention consists in the peculiar construction and arrangement of the various parts, as more fully hereinafter described.

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In the accompanying drawings, A represents my improved hub, divided into two sections, B C, each of which are alike; consequently a description of one of said sections is deemed sufficient. Each of these sections is provided with a base, *a*, and a cap, *b*, the inner faces of which are correspondingly grooved, as shown in Fig. 4, to receive the spokes D, and these inner faces are designed to fit each other closely when the parts are together. At the inner termination of the grooves in the base *a*, said grooves terminate in the sockets *d*, at right angles with the grooves, and in line with the bore of the hub, which engages with the axle. The spokes D are made of round metallic rods, the inner ends of which are bent at right angles, and this bent end, forming a hook, is inserted in said sockets *d*. The straight part of the spoke then is placed in the grooves in the face of the base *a*, and the cap *b* is then put in place, and secured by the nut *h*, or other equivalent device. The outer end of the spokes may pass through the rim E of the wheel, where they may be strongly riveted or otherwise secured, care being taken to so secure the spokes that they cannot accidentally be withdrawn from the rim. The two sections B C of the hub A are so cast that they are in one piece, and each end should be threaded, as shown, to receive the nut which holds the cap in place. This wheel may be secured to an axle in any convenient way.

A great weight being imposed, by means of the axle, upon this wheel is instantaneously transmitted, in part, to the upper part of the rim by the hooks upon the ends of the spokes, and the connection of said spokes, as described, to the rim. This would, under ordinary circumstances, tend to elongate the wheel sideways, or, in other words, destroy the true circle of the rim. This tendency is at once obviated by the peculiar arrangement of the

spokes drawing on the rim from all quarters, except that portion directly underneath the hub.

The spokes should radiate alternately from each section of the hub, as shown.

What I claim as my invention, and desire to secure by Letters Patent, is—

A vehicle-wheel having two similar parts, B C, cast in one piece, with sockets for receiving the hooks *d*, in combination with the caps *b*, nuts *h*, and spokes D D, having hooks *d*, substantially as set forth.

PETER GENDRON.

Witnesses :

H. S. SPRAGUE,

H. F. EBERTS.

P. GENDRON.
Vehicle-Wheels.

Patented April 21, 1874.

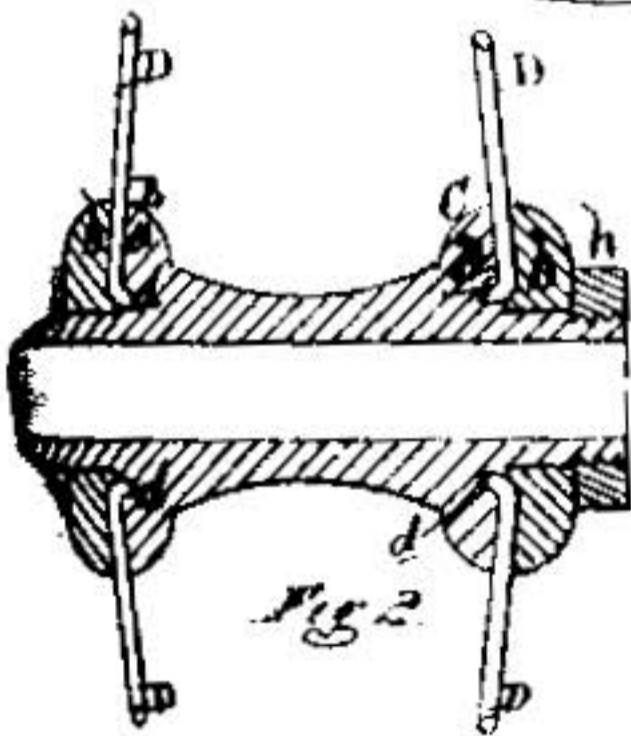
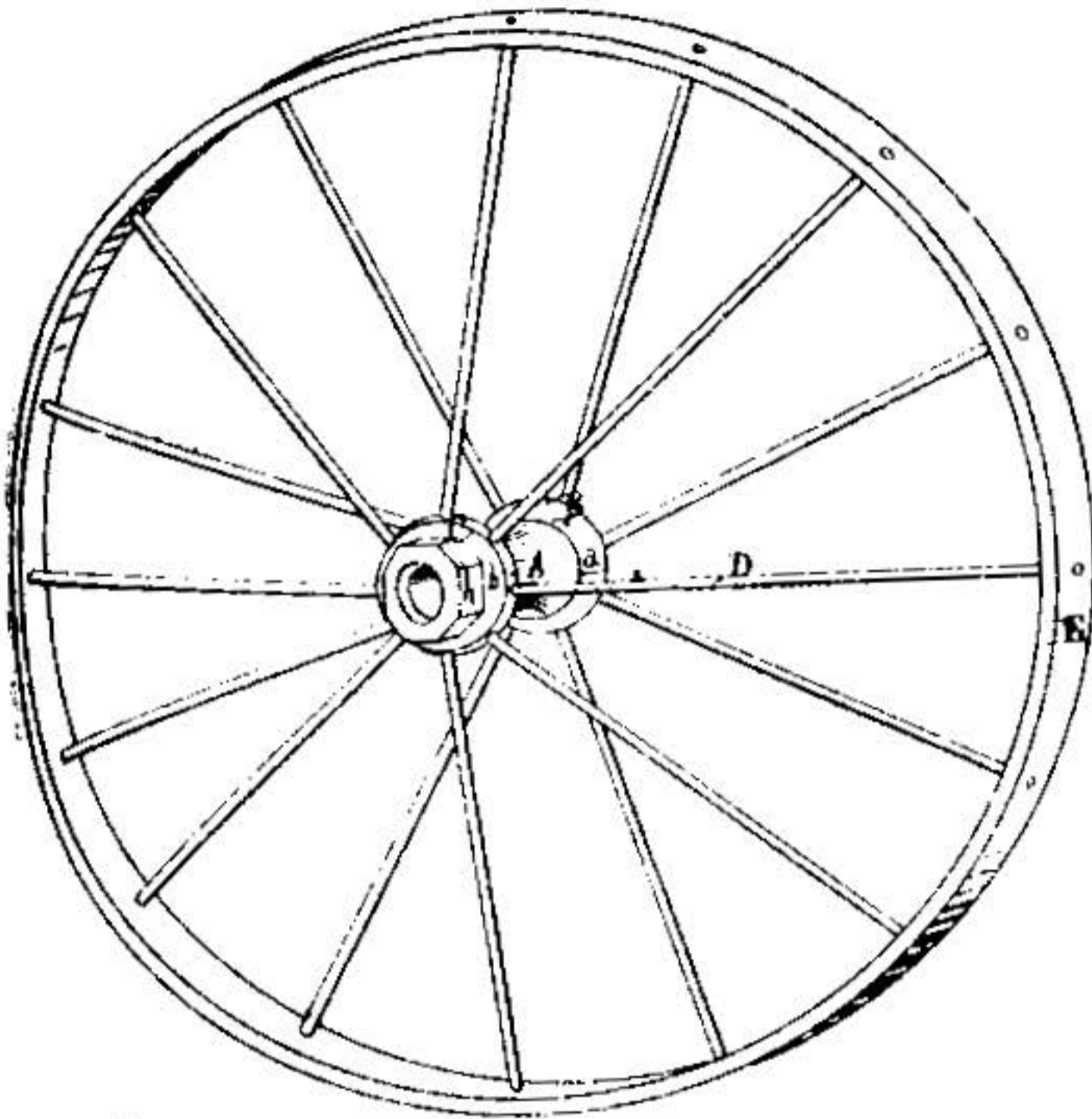


Fig 2

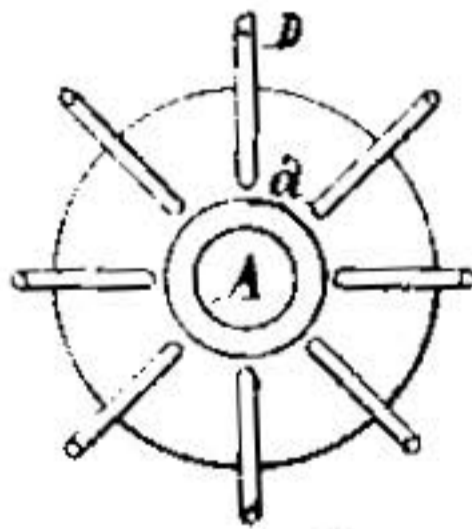


Fig 3

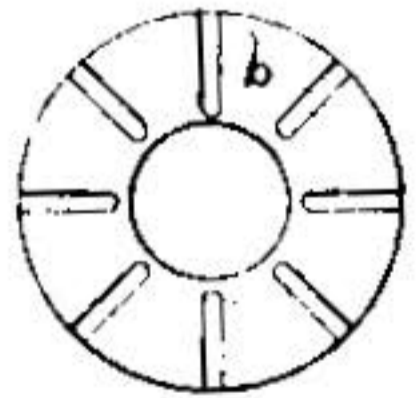


Fig 4

INVENTOR:
Peter Gendron
per attorney,
Wm. S. Sprague