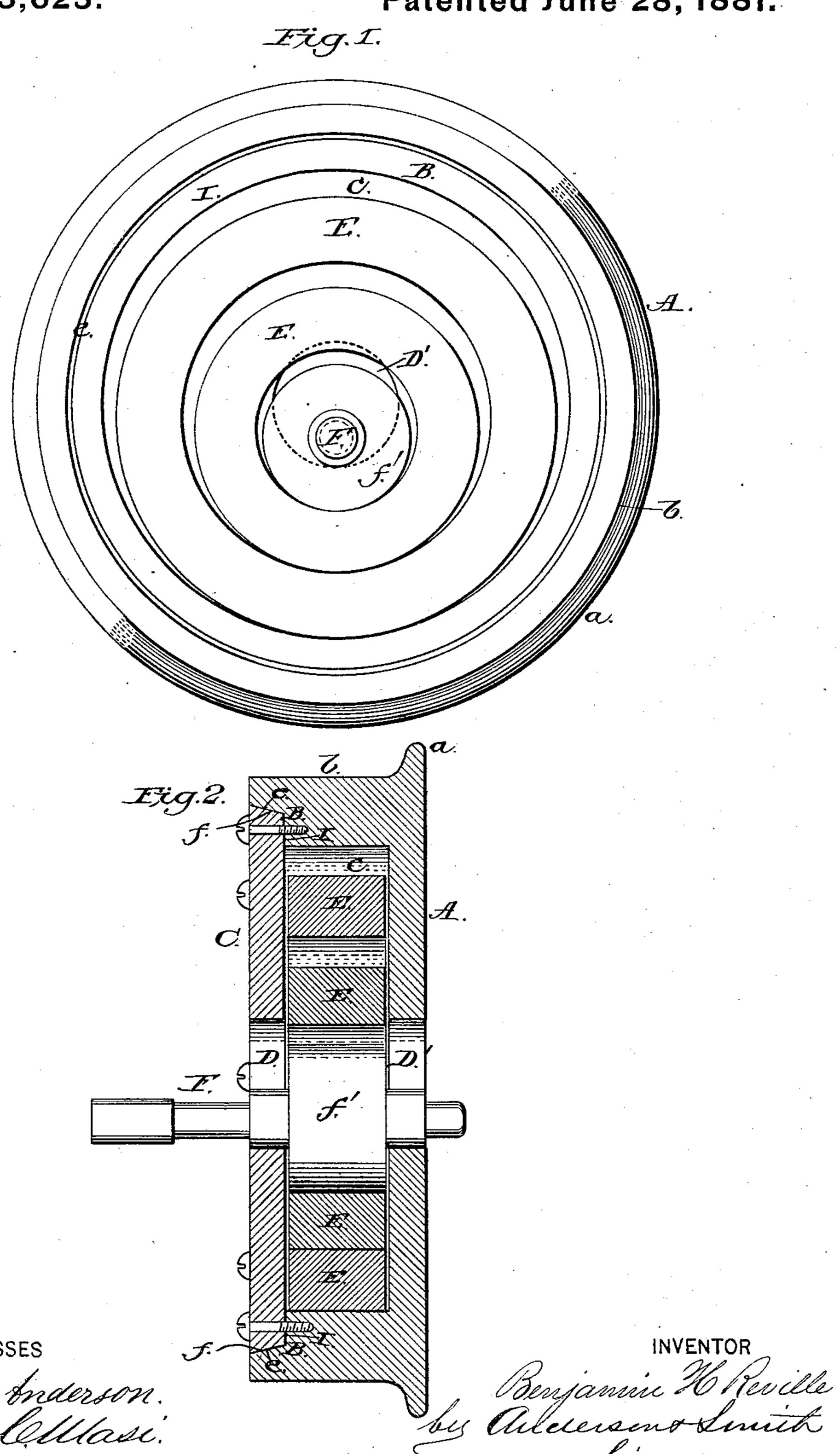
## B. H. REVILLE. Car Wheel.

No. 243,623.

Patented June 28, 1881.



## United States Patent Office.

BENJAMIN H. REVILLE, OF KANSAS CITY, MISSOURI.

## CAR-WHEEL.

SPECIFICATION forming part of Letters Patent No. 243,623, dated June 28, 1881.

Application filed April 16, 1881. (No model.)

To all whom it may concern:

Be it known that I, Benj. H. Reville, a citizen of the United States, resident at Kansas City, in the county of Jackson and State of Missouri, 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.

Figure 1 is a side elevation with the inner plate of the hollow wheel removed, and Fig. 2 is a vertical transverse sectional view.

This invention relates to improvements in car-wheels.

The object of the invention is the reduction of friction.

The invention consists in a hollow wheel having loose concentric rings within, as set forth hereinafter, and particularly pointed out in the claim.

In the annexed drawings, A is the shell of a car-wheel, having flange a, tread b, and interior circular cavity, c. Around the edge of this cavity is formed a rabbet, B, having flat bottom I and outwardly-flared side e, forming a seat for the cover-plate C, whose periphery f fits said rabbet, and into which it is secured by bolts. Centrally through this plate

and the shell are made the registering-holes D D'.

E represents concentric rings, two or more, which are to be placed within the wheel, one inside another, and having a thickness which brings them a little inside of the rabbet B, so that they have little side play. The inner diameter of the inner ring is greater than that of the holes D D'.

F is the axle, having the disk f' rigidly attached where it comes inside the shell and within the inner ring, E. The outer end of the 45 axle bears on the edge of the outer hole, D', and the body of the axle on that of inner hole, D. At the points where the axle bears on the edges of the holes it may be enlarged. The interior rings, when the car is moving, revolve 50 between the inner face of the cavity periphery and the circumference of the disk f', forming rolling surfaces, and, by consequence, diminishing the friction.

I claim—

In a car-wheel, the shell having the removable inner plate, C, and the concentric rings E, in combination with the axle F and disk f', substantially as and for the purposes set forth.

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

B. H. REVILLE.

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Witnesses:

W. H. LAMB, C. H. WOOD.