

(No Model.)

J. HARRIS, Jr.
WHEEL FOR VEHICLES.

No. 272,133.

Patented Feb. 13, 1883.

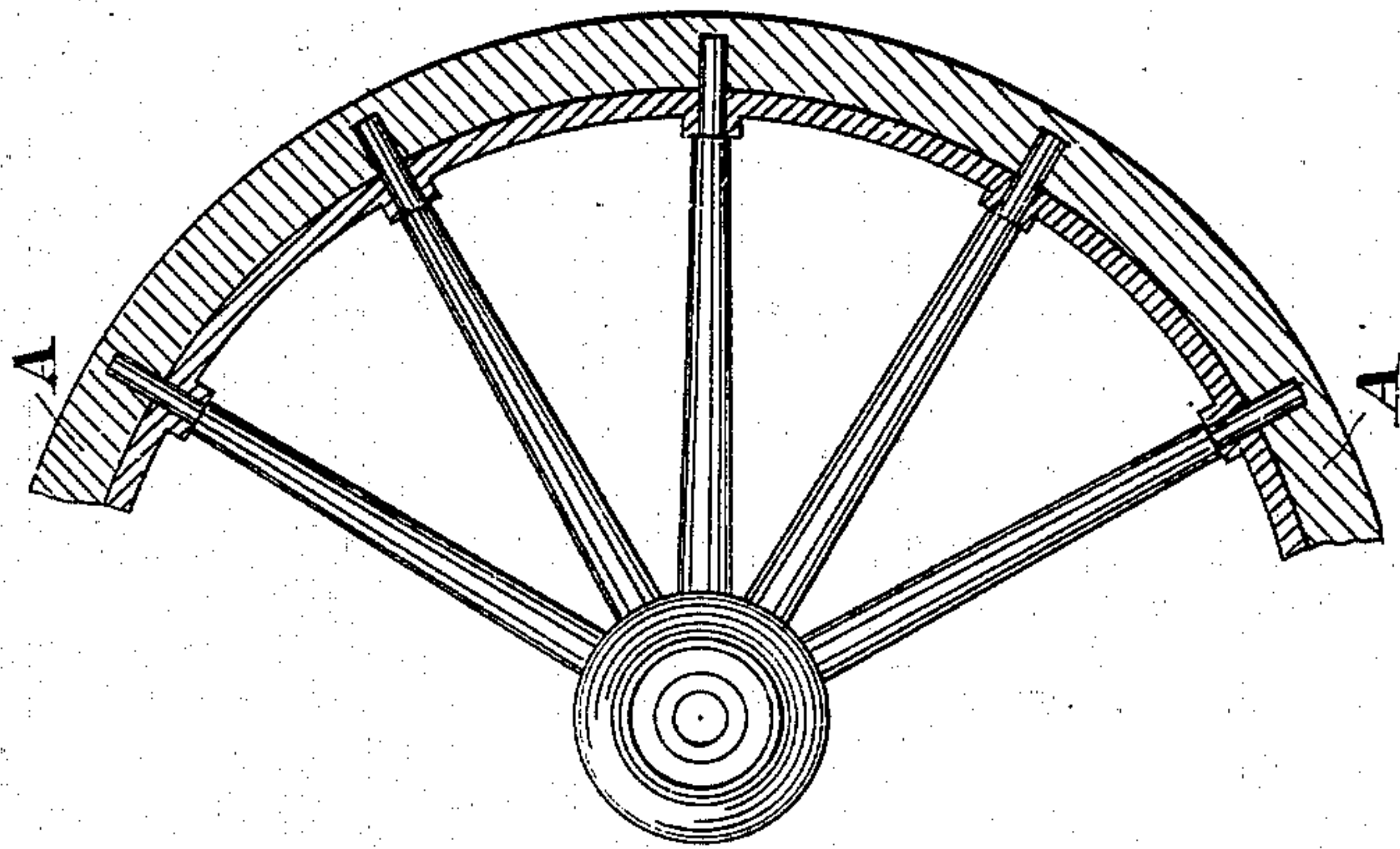


Fig. 2.

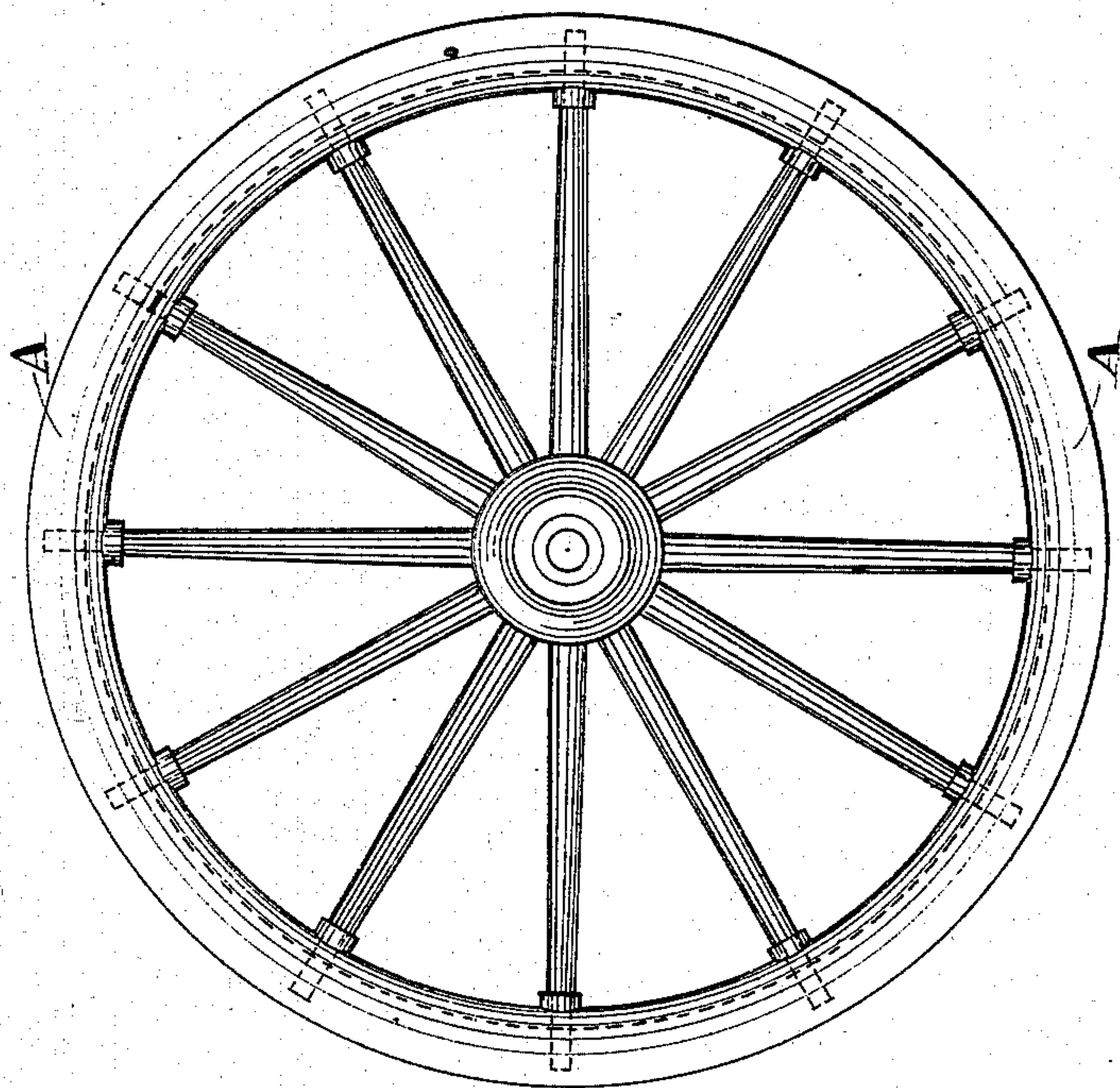


Fig. 3.

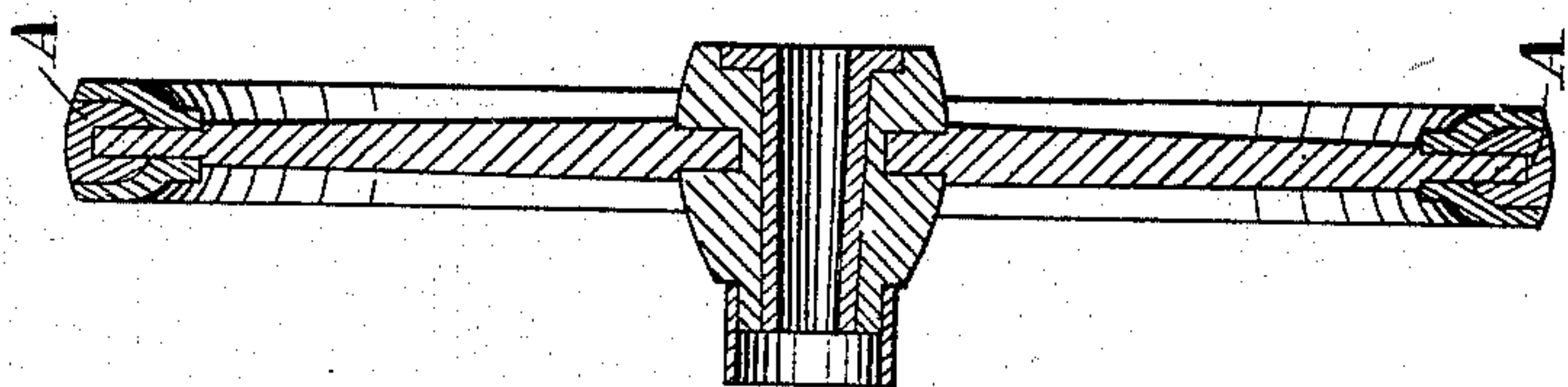


Fig. 1.

Witnesses:
Thomas Hibbard
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Inventor:
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UNITED STATES PATENT OFFICE.

JOSEPH HARRIS, JR., OF BOSTON, MASSACHUSETTS.

WHEEL FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 272,133, dated February 13, 1883.

Application filed December 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HARRIS, Jr., of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in the Construction of Carriage-Wheels.

The nature of my invention consists in constructing a wheel for carriage and other uses which does away with and does not require a tire for its perfection.

I construct a wheel with a metallic felly in whole or in segments, forming the entire circle or circumference. This felly is a metallic shell, and so cast or formed by the usual mechanical methods as to leave a groove which entirely surrounds the felly or circle of the wheel, and, should it be necessary, can be divided into sections by flanges being cast in the groove. The felly has holes or perforations, through which the ends of the spokes extend part way into the groove. I fill the felly-groove with concrete or other suitable substances, forming a hard smooth surface even with the edges of the felly, and by this means the spokes are held firmly within the same, thus producing a perfect wheel without a tire; and I do hereby declare the following to be a clear and complete description thereof, reference being had to the annexed drawings, making a part of this specification.

Figure 1 is a cross-section cut through the diameter of the wheel, extending and dividing the hub, thus showing the groove in the felly. (Marked A A.) Fig. 2 is a segment of the wheel, showing the felly with a groove, (marked A A,) which I fill to the outer edges of the felly with a concrete compound commonly used as a paving on highways, and is composed of asphalt, sand of a silicious nature, and petroleum residuum of a sufficient quantity to prevent fracture—a plastic compound that hardens after being put in the groove. By this means the ends of the spokes, which extend part way through the shell into the groove A, are held with great firmness and solidity. Fig. 3 is a side or general view of the wheel as seen when complete, and does not in appearance differ from those in general use.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

A wheel with a metallic felly surrounding the entire circle of the wheel, with a groove marked A A, with a concrete filling, as set forth and described.

JOSEPH HARRIS, JR.

Witnesses:

O. S. HARRIS,
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