

(No Model.)

A. CASAZZA.
CAR WHEEL.

No. 450,967.

Patented Apr. 21, 1891.

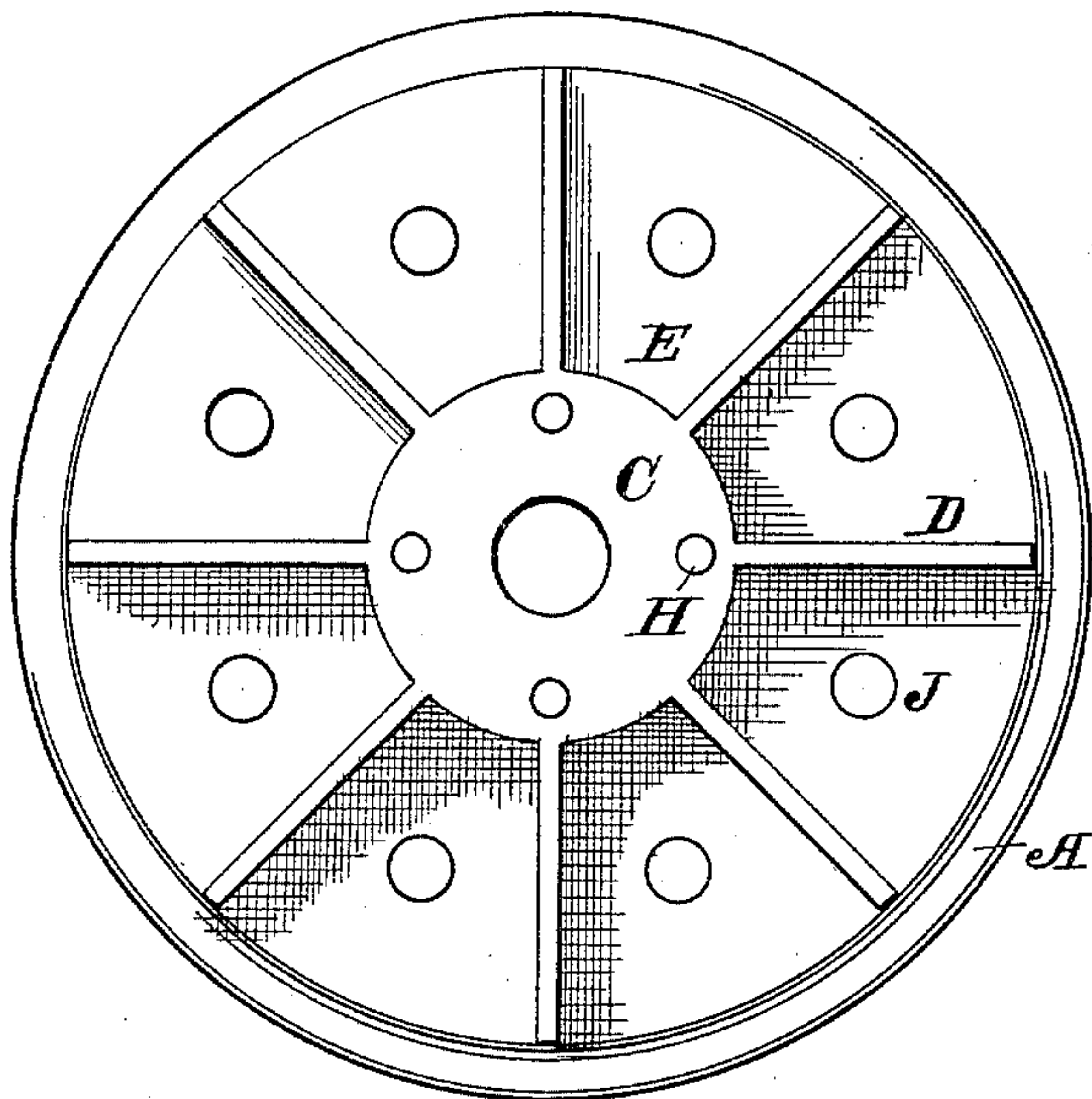


Fig. 2.

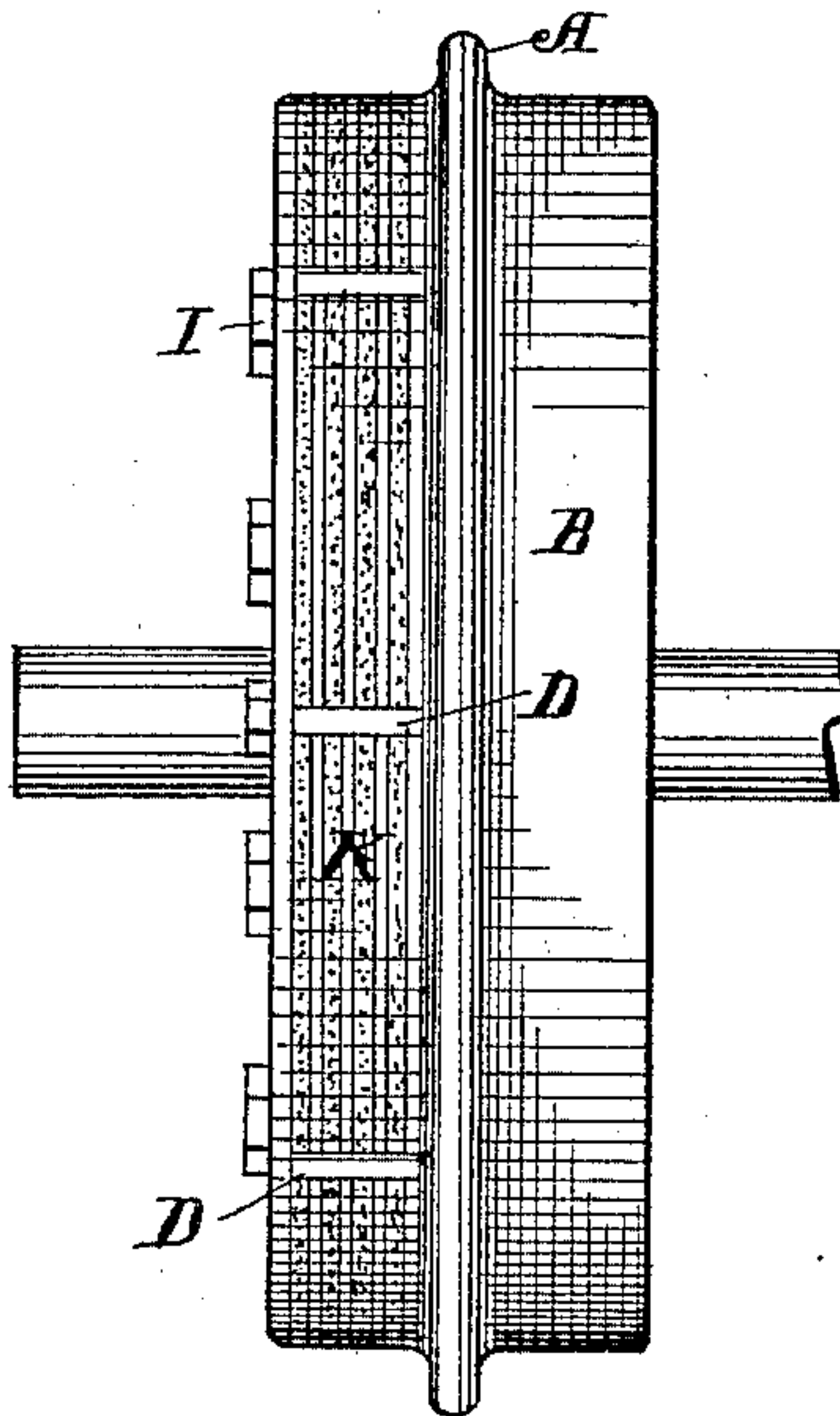


Fig. 1.

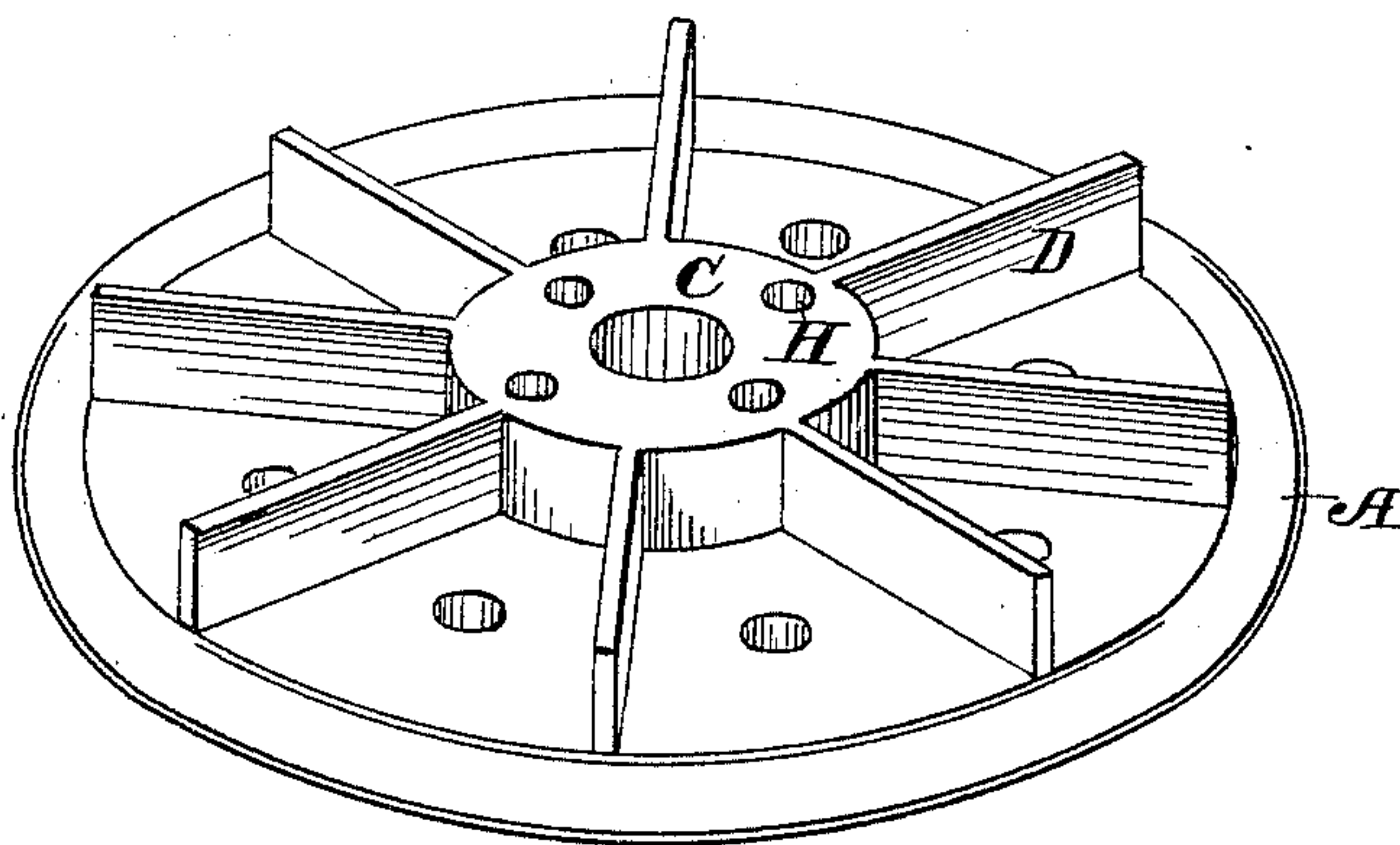


Fig. 3.

WITNESSES:

H. L. Young
D. S. McKins

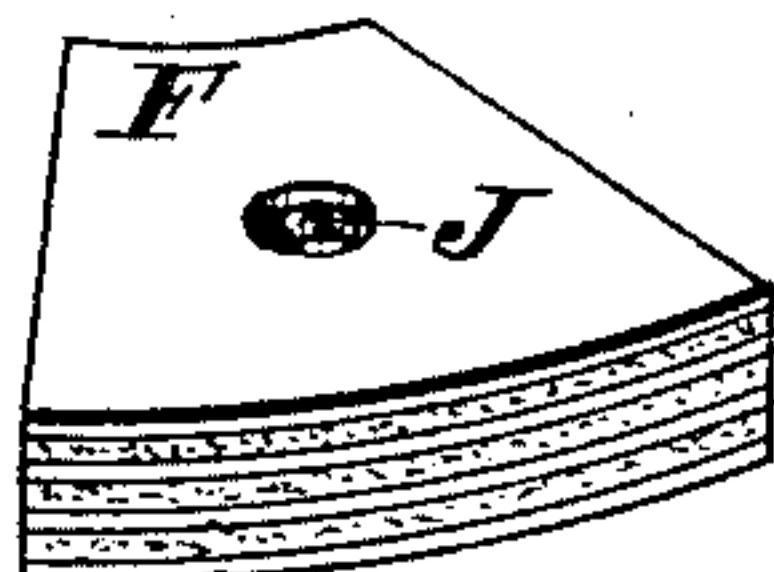


Fig. 4.

INVENTOR

A. Casazza

BY

[Signature]
ATTORNEY.

UNITED STATES PATENT OFFICE.

AUGUST CASAZZA, OF HOBOKEN, NEW JERSEY.

CAR-WHEEL.

SPECIFICATION forming part of Letters Patent No. 450,967, dated April 21, 1891.

Application filed August 2, 1890. Serial No. 360,846. (No model.)

To all whom it may concern:

Be it known that I, AUGUST CASAZZA, a citizen of the United States, and a resident of Hoboken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Car-Wheels, of which the following is a specification.

The object of my invention is to provide a car-wheel which will be noiseless in its movements along the rail; and it consists of a disk provided on one side with a hub and radial partitions or divisions which extend out a suitable distance. Between these divisions or partitions I place alternate layers of papier-maché, leather, rubber, or other elastic materials highly compressed or prepared to withstand wear, and over the whole I place a plate or disk which is securely bolted to the main portion of the wheel.

It further consists in providing a wheel with an iron and an elastic tread on opposite sides of the flange, the flange being placed in the center of the tread, for purposes which will be fully hereinafter set forth.

Figure 1 is an edge view of my improved car-wheel. Fig. 2 is a view of the outer face of the wheel with the disk and the elastic stock of the wheel removed. Fig. 3 is a perspective view of the outer face of the wheel as represented in Fig. 2, and Fig. 4, a perspective view of one of the elastic filling-segments for the wheel.

In the drawings, A represents the flange of a car-wheel having an iron tread B. On the opposite side from the tread B is a hub C, which projects out from the face of the wheel a distance nearly equal to the thickness or width of the tread B, and radiating from this hub are partitions D, which project out as far as the periphery of the tread B. In the spaces E between these partitions I place successive layers of suitable semi-elastic material—such, for instance, as compressed paper, rubber, or composition of various kinds that are now in the market and adapted for the purpose. I prefer to combine or use in each wheel layers of different materials, by means of which I obtain not only the advantages of the one material, but the combined effect of the va-

rious materials employed. Thus rubber, while it has poor wearing qualities, has elasticity, and compressed paper, on the other hand, has but little elasticity, comparatively, but is durable in use. It is not essential to my invention to enumerate the particular materials to be employed in the construction of my wheel, as it is obvious that numerous materials are well adapted for this, but to point out the particular manner in which I construct the wheel so as to hold in these elastic segments.

When all the sections are filled with the elastic segments F, I place over the same a metallic disk or plate G and secure it by bolts through the holes H and by bolts I through the holes J. These latter pass through the segments F and through the main portion of the wheel, as well as through the disk or plate G. By using large bolts I, I am enabled to very tightly compress the segments, while at the same time the bolts can be removed at any time and the segments F replaced.

It will be seen that in Fig. 1 the wheel is shown with a metal tread B, with the flange A between the elastic tread K and the metal tread B. I have shown this construction because of certain purposes where it is found desirable to apply power to the wheels by means of frictional contact. It is obvious that it would not be practicable to place the brake-blocks against the elastic tread K. Therefore it is essential to have a friction-bearing surface A for this purpose. Hence the necessity of providing a double tread-wheel, as shown.

What I claim as new is—

1. In a car-wheel, the main body of the wheel having on one side a projecting hub and integral therewith the radial partitions extending from said hub, in combination with elastic or yielding segments within the spaces formed by the partitions, which segments extend out flush with the ends of the radial partitions, so as to form a yielding tread of the same diameter as the metal tread of the wheel, and the plate and bolts for holding said segments in position, substantially as herein set forth.

2. In a car-wheel, the main body of the wheel having a metal tread and flange and on its outer side a hub and radial partitions, in combination with elastic or yielding segments and retaining plate or disk and bolts
5 for holding the same in position, substantially as herein set forth.

Signed at New York, in the county of New York and State of New York, this 1st day of August, A. D. 1890.

AUGUST CASAZZA.

Witnesses:

J. S. ELKINS,
S. N. A. KRAUS.