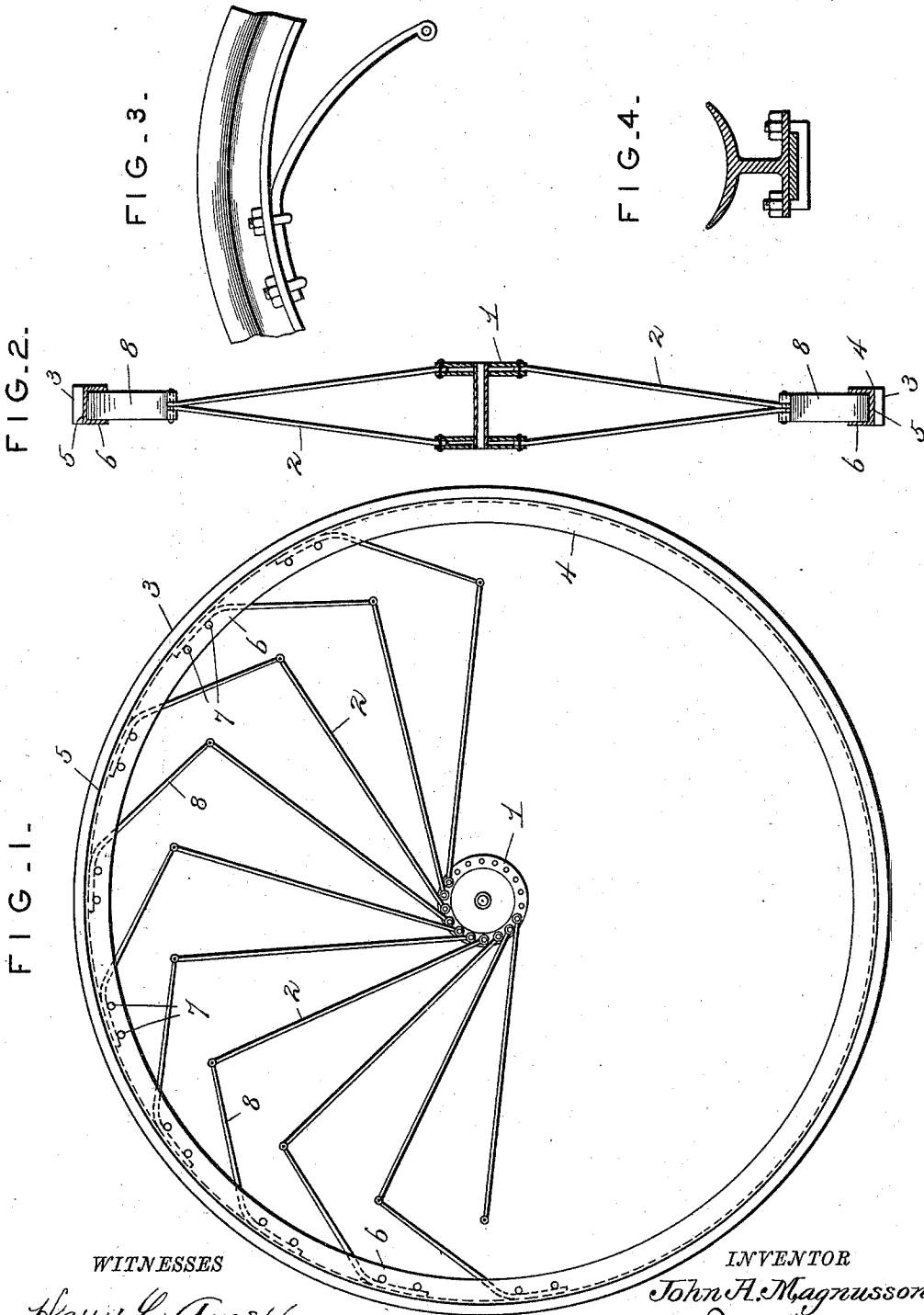


(No Model.)

J. A. MAGNUSSON.
BICYCLE WHEEL.

No. 579,490.

Patented Mar. 23, 1897.



WITNESSES
Harry L. Ames.
C. Keiff.

INVENTOR
John A. Magnusson.
By John W. Adair.
Attorney

UNITED STATES PATENT OFFICE.

JOHN AUGUST MAGNUSSON, OF TACOMA, WASHINGTON.

BICYCLE-WHEEL.

SPECIFICATION forming part of Letters Patent No. 579,490, dated March 23, 1897.

Application filed September 21, 1896. Serial No. 606,563. (No model.)

To all whom it may concern:

Be it known that I, JOHN AUGUST MAGNUSSON, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Bicycle-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.

This invention relates to a novel construction in a wheel adapted more especially to be used for bicycles.

In the accompanying drawings, illustrating this invention, Figure 1 is a side elevation of a bicycle-wheel constructed in accordance with my invention and partially in section. Fig. 2 is a cross-section of the same. Fig. 3 is a fragmentary side elevation of a modified construction. Fig. 4 is a cross-section of the same.

In said drawings, 1 indicates the hub, 2 the spokes, and 3 the tire, of the wheel. The rim 4 consists of an annular channel-bar—that is to say, it is provided with a flat portion 5 and the inwardly-projecting flanges 6. Extending between the flanges 6 of the rim 4 are the pins 7, which are preferably riveted to said flanges. Two of said pins are arranged for each spoke in the wheel, and between the spokes and rim are the springs 8. These springs can be either single or double leaf springs that are pivotally connected at their inner ends with the outer ends of the spokes, while the outer ends of the springs are secured between the pin 7 and the flat portion 5 of the rim. The outer end portions of these springs are secured by bending down the ex-

treme end portion a little distance to prevent it from pulling out, while the portion of the springs between the pins 7 7 is bent away from the flat portion of the rim, so that when in use it will not constantly rub thereon to cause wear.

It will be seen from the foregoing description that the wheel will contract or give to a certain extent, so that undue jarring and jolting is compensated for thereby, and I claim also by this construction that a greater leverage is obtained by reason of the fact that under a weight that will contract the wheel the axial center of the wheel descends and thus increases the leverage.

In Figs. 3 and 4 is shown a construction embodying this invention and adapted to be used when it is desired to use a pneumatic tire. This construction will be obvious, as it merely consists in a change in the shape of the rim and the manner in which the outer ends of the springs are secured thereto.

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

In a wheel, a hub, spokes, springs pivotally secured to said spokes, an annular channel-rim, pins extending between the flanges of said rim, between which pins and the outer portion of the rim the outer end portions of the springs are located, and the tire upon said rim, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN AUGUST MAGNUSSON.

Witnesses:

J. W. SILFBERG,
J. P. AUBERG.