

No. 724,896.

PATENTED APR. 7, 1903.

G. A. LAVENDER.
ATTACHMENT FOR RIMS OF TRACTION WHEELS.
APPLICATION FILED JAN. 31, 1903.

NO MODEL.

Fig. 1.

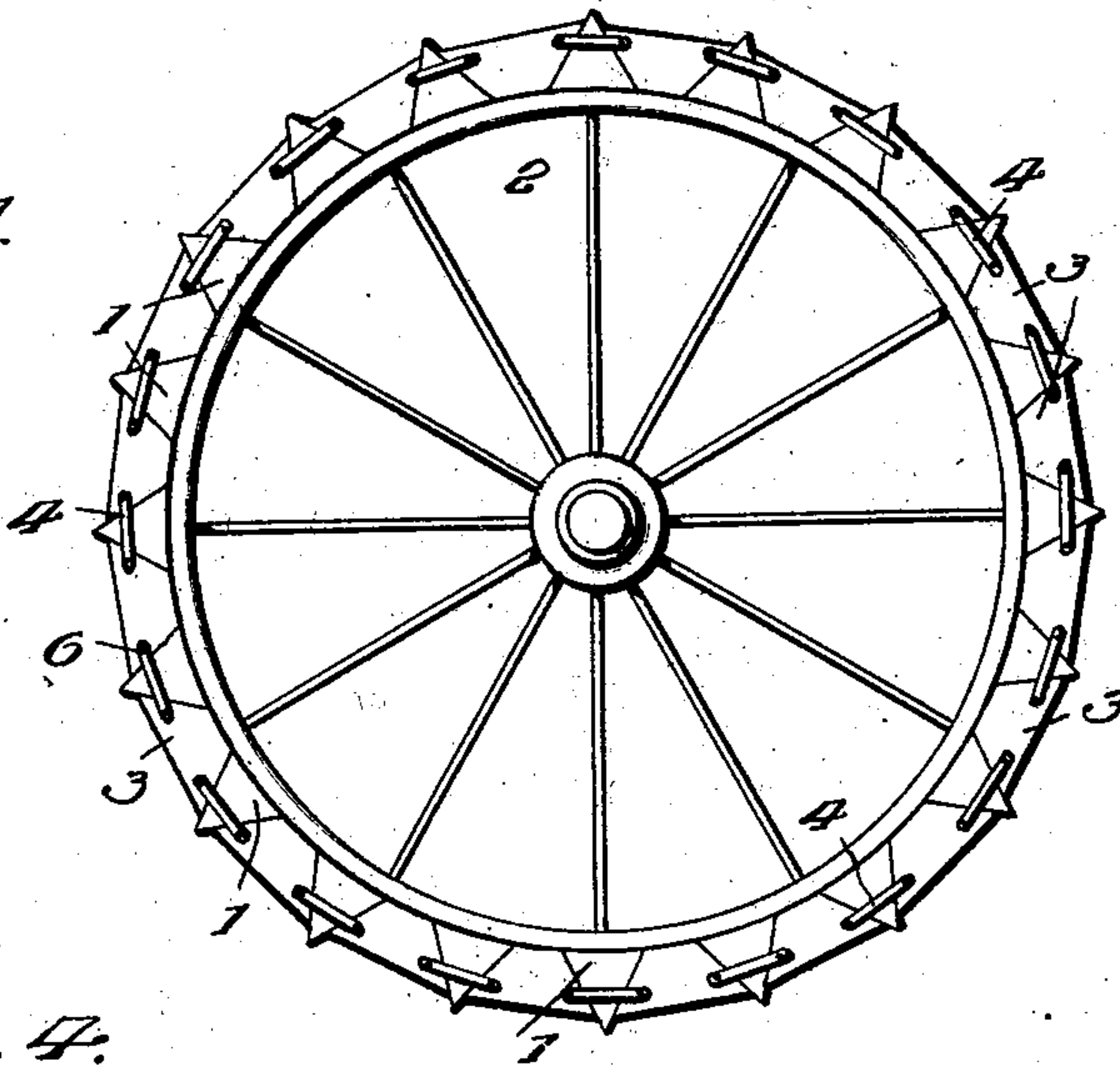


Fig. 4.

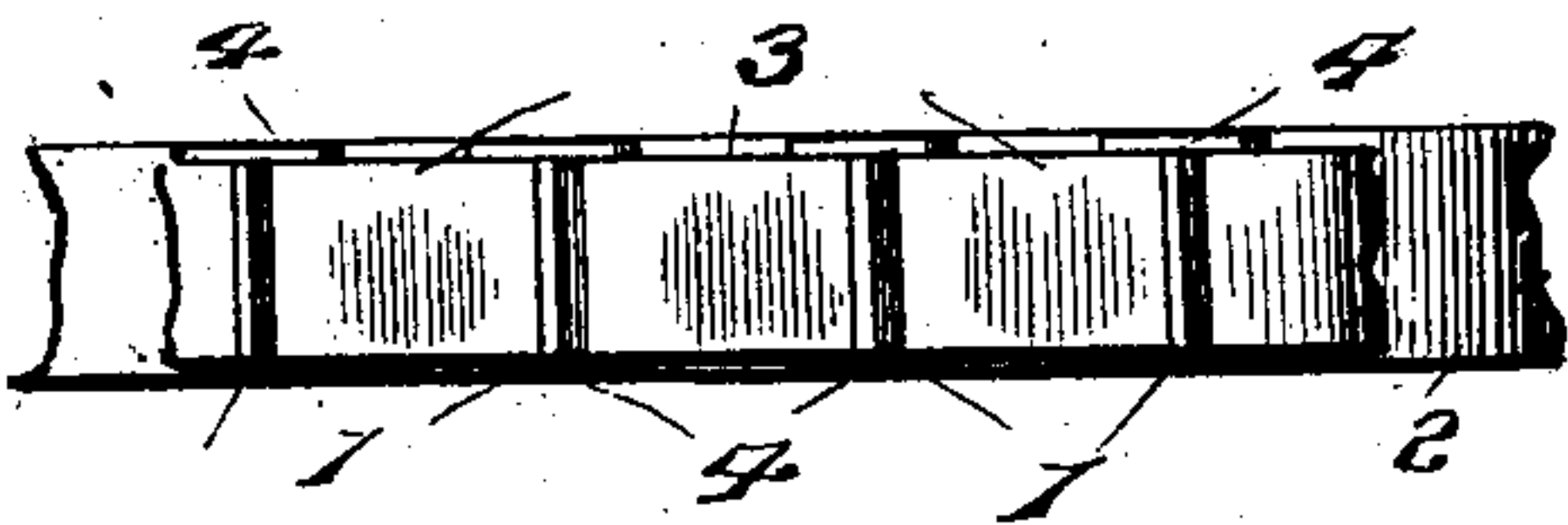


Fig. 2.

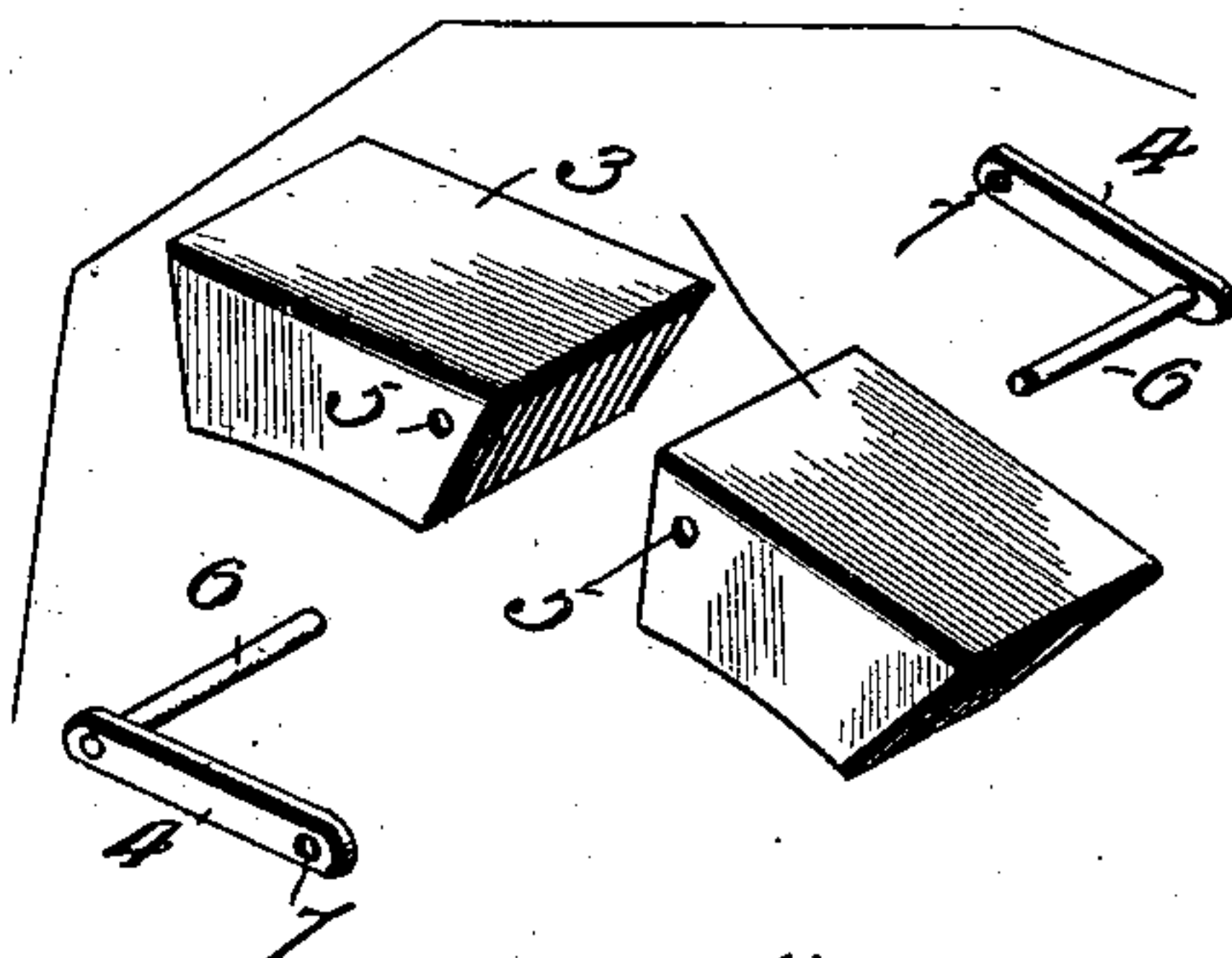
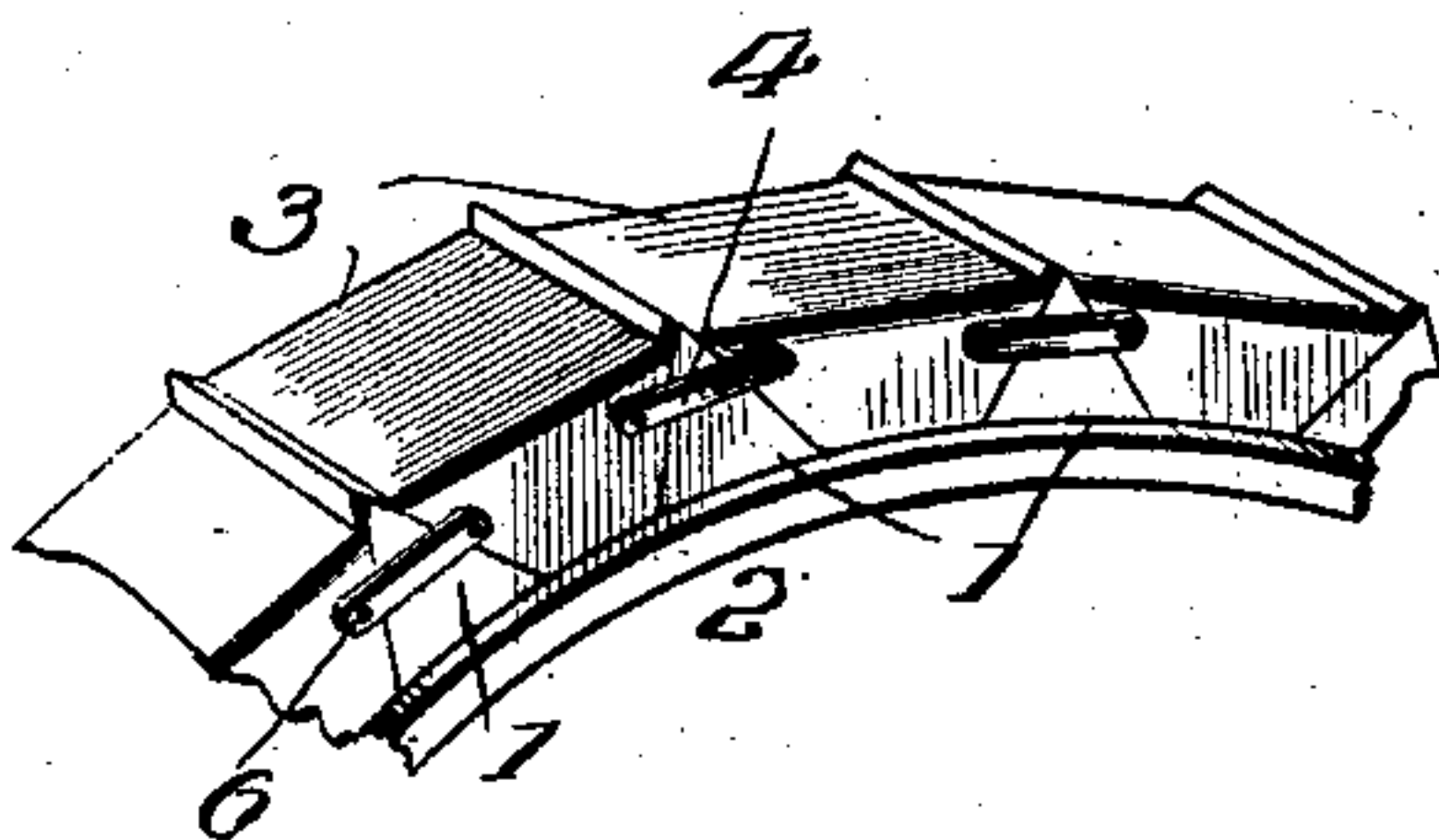
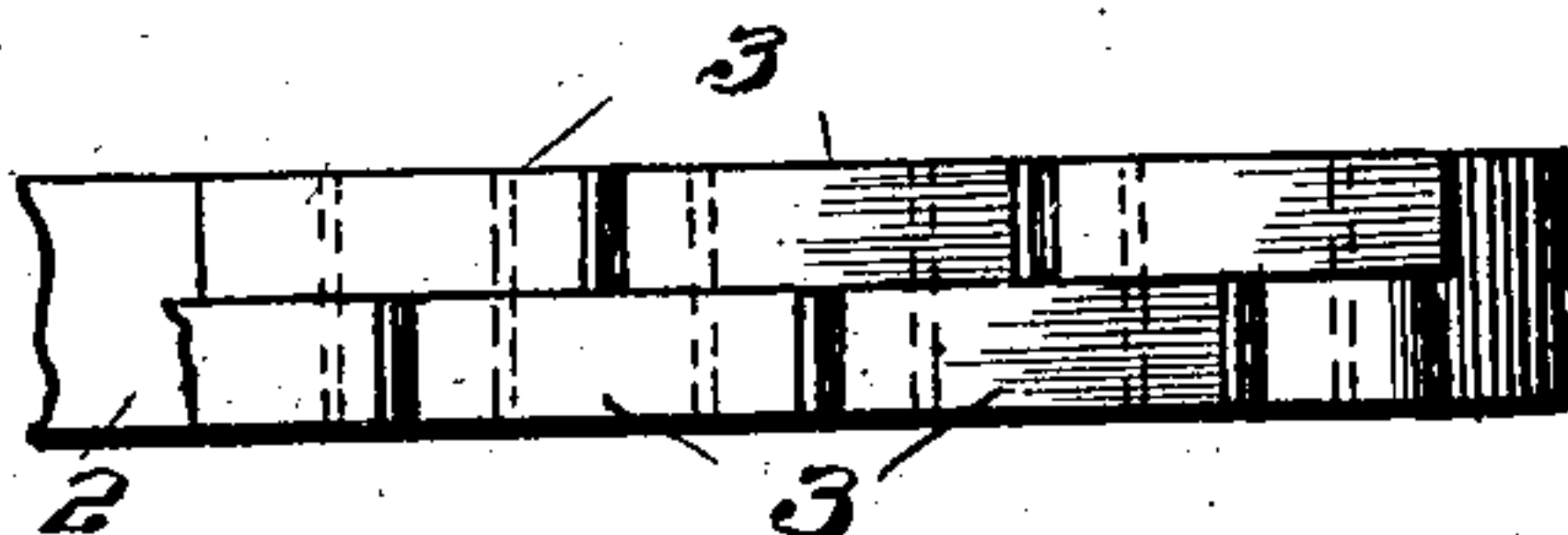


Fig. 3.

Fig. 5.



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GEORGE A. LAVENDER, OF ROANOKE, LOUISIANA.

ATTACHMENT FOR RIMS OF TRACTION-WHEELS.

SPECIFICATION forming part of Letters Patent No. 724,896, dated April 7, 1903.

Application filed January 31, 1903. Serial No. 141,345. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. LAVENDER, a citizen of the United States, residing at Roanoke, in the parish of Calcasieu and State of Louisiana, have invented certain new and useful Improvements in Attachments for the Rims of Traction-Wheels, of which the following is a specification.

The primary object of this invention is to fill the space between the lugs of drive-wheels of agricultural machinery, such as harvester-binders, mowers, reapers, and the like, deriving power from the ground-wheels for actuating the operating parts. The invention is also designed for use in connection with traction-wheels applied to machinery of any kind having lugs to prevent slipping and insure positive rotation when drawn over the field, road, or other surface.

The purpose of the invention, as herein stated, is to provide a novel means for filling the space between the lugs of traction-wheels when desired, and in accordance with this invention the attachment in its general construction presents the appearance of a belt composed of links of novel formation and connected in a unique manner, as will appear more fully hereinafter, reference being had to the drawings hereto attached, forming a part of this specification.

Figure 1 is a side view of a traction-wheel, showing the application of the invention. Fig. 2 is a perspective view of a portion of the rim of a traction-wheel, showing the attachment in place. Fig. 3 is a detail view in perspective of a portion of a protector embodying the invention, the component parts being separated. Fig. 4 is a detail view showing a portion of the protector applied to a section of the rim of a wheel. Fig. 5 is a view similar to Fig. 4, showing a double protector applied to the rim portion of a traction-wheel having two sets of cogs or lugs.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The traction-wheel may be of any style and construction, according to the nature of the machine with which it is used and may embody one or more rows of lugs around its rim,

according to the breadth of the tread. In the event of the wheel being provided with more than one row of lugs which are spaced apart each row will be provided with an attachment or protector, and inasmuch as the general construction of the traction-wheel embodies a single row of lugs the wheel illustrated is of this class.

The lugs 1 project radially from the rim or tread of the traction-wheel 2 and are outwardly tapered, so as to provide penetrating points to enter the surface of the ground and prevent slipping of the wheel when the machine is drawn over the surface. The protector or attachment is of endless construction and is of the nature of a chain belt, being composed of links flexibly connected, the alternate links being solid and the intermediate links being bars and embracing opposite sides of the solid links. The solid links 3 are of wedge form in side view and are of a size to fill the spaces between adjacent lugs and of a depth to admit of the points of the lugs projecting. The solid links may be of metal, wood, or other material best adapted for the particular use of the invention and the nature of the surface over which the traction-wheel travels. The solid links have their ends about flush with the ends of the lugs, thereby admitting of the bar-links embracing the ends of the lugs, so as to prevent lateral displacement of the protector or attachment when in place. Openings 5 are formed transversely in the upper corner portions of the links 3 to receive the pintles 6, by means of which the bar-links 4 are pivotally connected to the solid links 3.

A pair of links 4 connects each two solid links 3, and each link 4 is of L form and comprises a pintle 6 and a bar, the pintle being round in cross-section and the bar being preferably flattened and provided at the end opposite the pintle with an opening 7 to receive the terminal of the pintle of the companion link. The bar-links are of considerably less width than the solid links and are located near the outer surfaces of said solid links, thereby admitting of a minimum amount of material being used in their formation, as well as affording protection for the outer ends of the lugs, as the protector or attachment can be replaced at a less

cost than the traction-wheel. The links of each pair are oppositely disposed, the pintle of one link passing through the opening 7 of the companion link, the parts being secured
 5 by upsetting or riveting the projecting ends of the pintles or in any manner best adapted for the purpose.

The essential feature of the invention is to lighten the draft and to protect the machine
 10 from jar or jolt when drawn over a road or surface, the solid links of the protector filling the space or spaces between each two adjacent lugs. The solid links may be of a height to come flush with the points of the lugs or to
 15 leave a part of the same projected. In the construction shown in Fig. 5 two rows of lugs are arranged around the rim of the wheel, the lugs of one row or set being disposed opposite the space between the lugs of the other row
 20 or set. The protector for this form of traction-wheel has the solid links of one chain or belt disposed opposite the space between the solid links of the other chain or belt. The width of the protector will depend upon the
 25 tread or transverse extent of the traction-wheel and the length of the lugs thereof. When the protector is in place, the spaces between the lugs are filled. Hence the machine will run smooth upon hard ground just the
 30 same as if the lugs were not present.

Having thus described the invention, what is claimed as new is—

1. In combination with a traction-wheel provided with lugs, an attachment or protector therefor composed of solid and bar links
 35 alternately disposed and pivotally connected, the solid links being of wedge form in side view and adapted to fill the space between adjacent lugs and the bar-links embracing
 40 opposite ends of said lugs and serving to prevent lateral displacement of the attachment, substantially as set forth.

2. In combination with a traction-wheel provided with lugs projected radially from its rim or tread, a protector or attachment com-
 45 posed of solid and bar links alternately arranged and pivotally connected, the solid links being of wedge form to snugly fit the space between adjacent lugs and having trans-
 50 verse openings in their outer corner portions and the bar-links embracing the solid links and lugs and having pivotal connection with the outer corner portions of the solid links, substantially as specified.

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

GEORGE A. LAVENDER. [L. S.]

Witnesses:

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