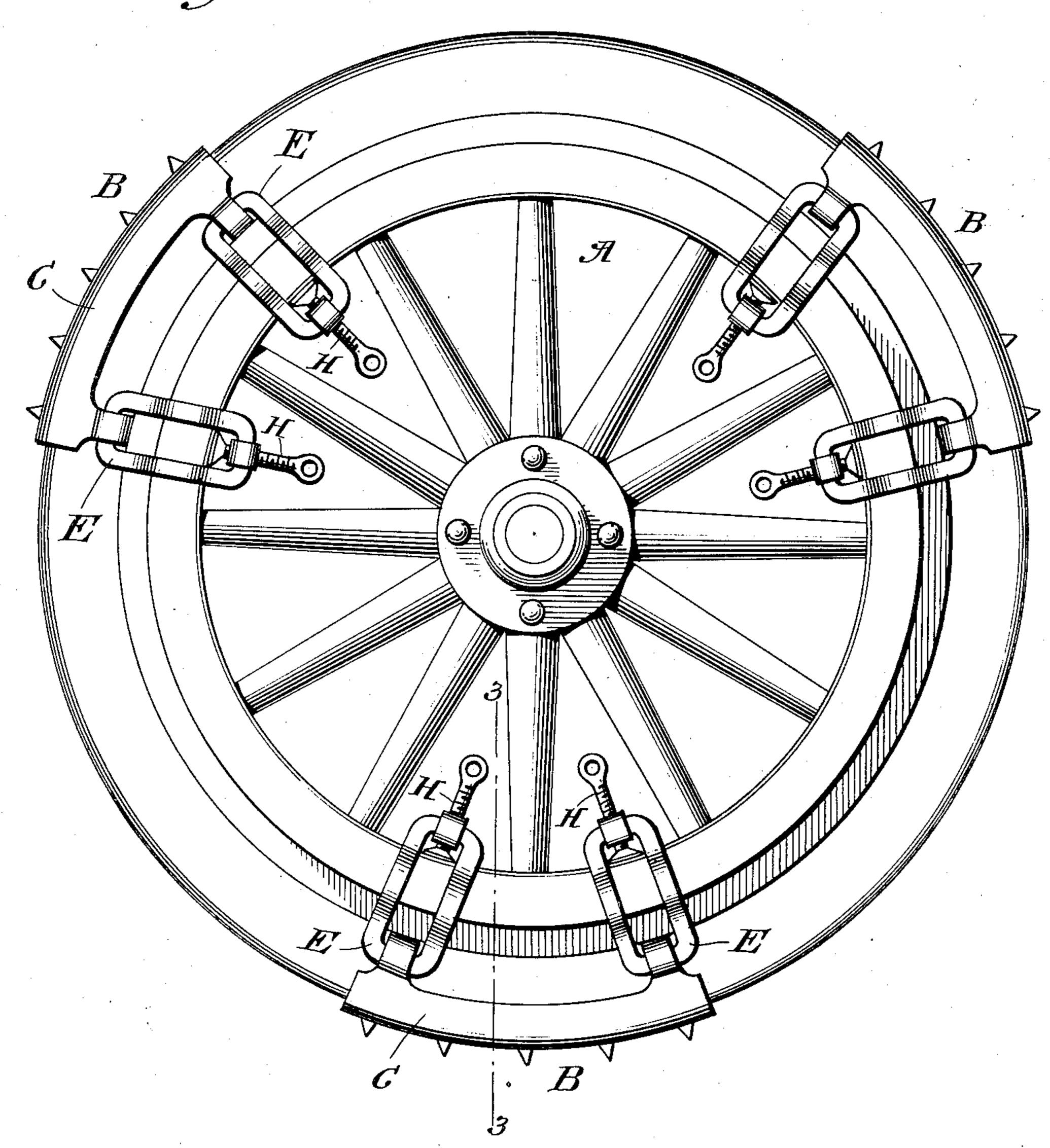
## G. W. CONSTABLE. ANTISKIDDING SHOE FOR AUTOMOBILES. APPLICATION FILED FEB. 25, 1908.

906,776.

Patented Dec. 15, 1908

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses M. C. Lyddanc J. a. J. Mulhall. George W. Constable

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Attorney

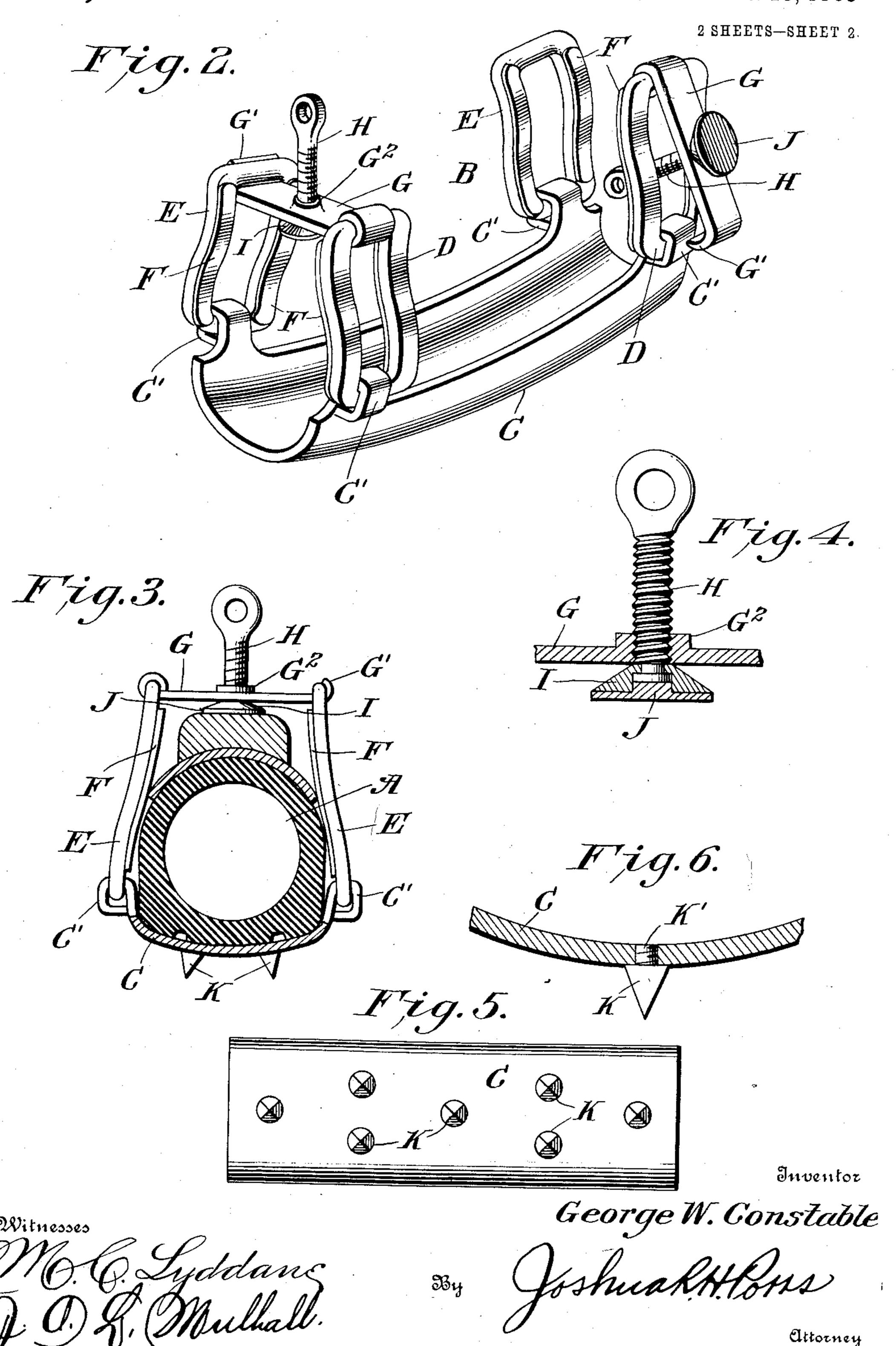
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## UNITED STATES PATENT OFFICE.

GEORGE W. CONSTABLE, OF WAYNE, PENNSYLVANIA.

## ANTISKIDDING SHOE FOR AUTOMOBILES.

No. 906,776.

Specification of Letters Patent.

Patented Dec. 15, 1908.

Application filed February 25, 1908. Serial No. 417,761.

To all whom it may concern:

Be it known that I, George W. Constable, a citizen of the United States, residing at Wayne, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Antiskidding Shoes for Automobiles, of which the following is a specification.

This invention relates to anti-skidding shoes for automobile wheels, especially adapted to be used on heavy vehicles, such as delivery wagons, the object being to provide a shoe which can be easily and quickly placed on the wheel, and one which when in position will be securely held thereon, and prevent the wheel from skidding or slipping.

Another object of my invention is to provide the shoe with very novel means for securing it in position on the wheel, whereby it will be held tightly thereon, so as to prevent the same from rattling or working loose in any way so as to injure the tire.

Another object of my invention is to provide the shoe with detachable calks, whereby new ones can be readily inserted when they become worn.

Another object of my invention is to provide a shoe which is exceedingly simple and cheap in construction, and one which is very strong and durable.

These objects are obtained by the novel arrangement and construction of parts hereinafter fully described and shown in the accompanying drawings, in which:

showing the application of my improved shoe. Fig. 2, is a perspective view of the shoe detached. Fig. 3, is a section taken on line 3—3 of Fig. 1. Fig. 4, is a detail section through the connecting bar and head of clamping screw. Fig. 5, is an inverted plan view of the shoe, and, Fig. 6, is a detail section of the shoe showing the manner of secur-

In the drawings A, indicates a vehicle wheel on which are arranged my improved shoes B, and in practice I have found that three are sufficient to prevent the same from slipping or sliding, but, it of course being understood, that as many can be used as desired.

The shoe comprises a longitudinally curved channel plate C, provided with oppositely disposed ears C', adjacent its ends, in which are pivotally mounted links D and E, the links being covered with packing material F,

so as to prevent the same from injuring the felly of the wheel when arranged thereon.

The links D, are provided with connecting bars G, having a hooked end G', adapted to 60 fit under the respective link E, and connect the links together, and in placing the shoe on the wheel, the shoe is placed directly over the spoke, so that the connecting bars G, will pass over the felly between the spokes and 65 hold the shoe in position.

Central threaded bosses G<sup>2</sup>, are formed in the connecting bars G, in which are mounted clamping screws H, having heads I, swiveled on their lower ends, over which are secured 70 leather washers J, adapted to bear against the felly of the wheel.

The outer ends of the clamping screws are provided with eyes, in which an instrument can be inserted, so as to force the clamping 75 screw down tightly against the felly, which will draw the shoe tightly against the wheel so that it will be impossible for the same to move.

It will be seen that as the clamping screw 80 is forced down upon the felly, the connecting bars will be forced up against the ends of the links and securely held in that position, so that it will be impossible for the same to accidentally become detached.

Threaded bores are formed in a zig zag manner in the shoe, in which the threaded shanks K', of calks K, are adapted to be secured, so as to prevent the shoe from skidding or slipping, and it will be seen that when 90 these calks become worn, they can be readily replaced by new ones, by simply unscrewing the same with a wrench and screwing in new ones.

From the foregoing description it will be 95 seen that I have provided a shoe which is composed of a very few parts, which are so arranged that they are not likely to get out of order, and one which when attached will not injure the tire or wheel in any way.

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

1. An anti-skidding shoe for vehicle wheels comprising a longitudinally curved chan- 105 neled plate in the form of a segment of a circle having a studded outer surface, links carried at each end on opposite sides of said plate, each link having inner and outer transverse bars, cross bars adapted to engage over 110 the felly of a wheel pivoted to the inner bars of the links on one side of said plate and each

having a hooked end adapted to engage under the inner end bar on the opposite link, said connecting bars having screws extending therethrough, each screw having a plate swiveled to its inner end adapted to fit against the inside of the wheel felly, the other end of each of said screws being formed with means whereby they may be turned.

2. An anti-skidding shoe for vehicle wheels
10 comprising a longitudinally curved channeled plate in the form of a segment of a circle having a studded outer surface, the material of said plate at the sides thereof being
formed into outwardly projecting lugs which
15 are bent over to form hooks, opposed metal
links having inner and outer transverse
bars, the outer of said bars being received
within said hooked ears to have pivotal engagement therewith, the inner bar of each

link on one side of the shoe being provided 20 with a cross bar pivoted thereto and adapted to engage over the felly of a wheel, the free end of said cross bar being hooked to engage under the inner transverse bar of the link on the opposed side of the shoe, each 25 cross bar having a threaded boss thereon, a clamping screw passing through said boss carrying on its lower end the swiveled plate adapted to bear against the inside of a felly of a wheel each screw at its upper end having 30 means whereby the screw may be turned.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

GEORGE W. CONSTABLE.

Witnesses:

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R. H. KRENKEL, CHAS. E. POTTS.