April 13, 1926. 1,580,385

H. R. SCHROEDER

ROAD BAND

Filed Dec. 5, 1923

Fig. 1

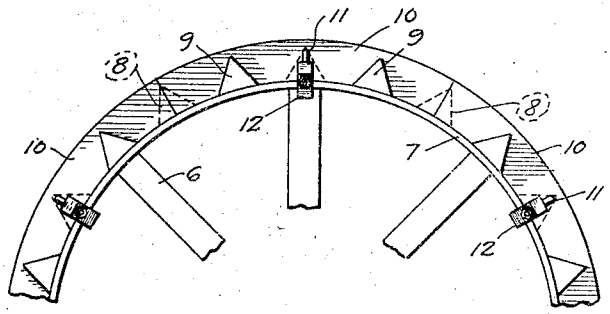


Fig. 3

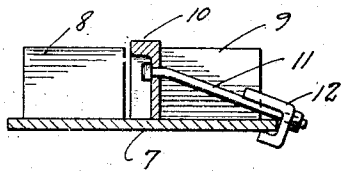


Fig. 2

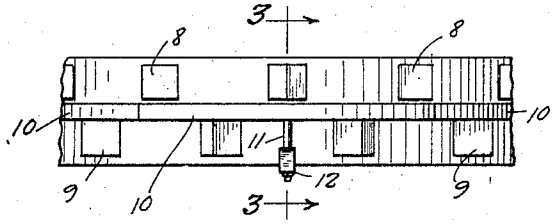


Fig. 4

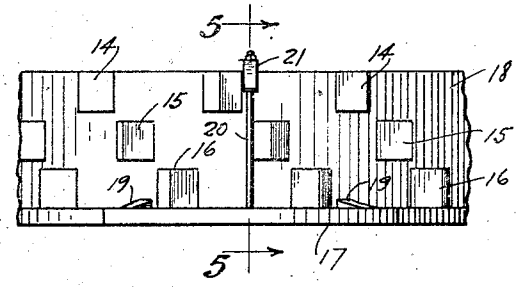
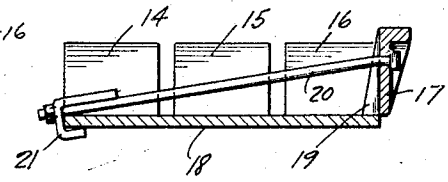


Fig. 5



INVENTOR.

Harry R. Schroeder

BY Westall and Wallace

ATTORNEYS

Patented Apr. 13, 1926. 1,580,385

UNITED STATES PATENT OFFICE.

HARRY R. SCHROEDER, OF ETHANAC, CALIFORNIA.

ROAD BAND.

Application filed December 5, 1923. Serial No. 678,592.

To all whom it may concern:

Be it known that I, HARRY R. SCHROEDER, a citizen of the United States, and resident of Ethanac, in the county of Riverside and State of California, have invented new and useful Improvements in a Road Band, of which the following is a specification.

This invention relates to a device for application to wheels having grousers, and is for the purpose of providing a continuous tread. Tractors employing wheels having grousers, lugs, cleats and the like, hereafter broadly called shoes, often must be moved from place to place along and over highways. The shoes break up the highway and destroy the surface thereof. For this reason it is prohibited by law in many places from driving a vehicle possessing wheels with shoes over a highway unless wheels having continuous treads are used, or bands are mounted upon the wheels to prevent the shoes from entering the surface of the highway. Continuous bands have been placed upon the wheels to cover the shoes and thus to provide a continuous tread. However, these bands being detachable are difficult to secure to the wheel and to maintain in place during operation. Furthermore, a great deal of time is required to attach and detach the bands.

The principal object of this invention is to provide a sectional tread which bears upon the rim of the wheel and extends as high as the shoes. Another object is to provide a wheel band built up of sections so arranged that the band may be attached and detached without raising or jacking up the wheels.

In addition to the broader objects of this invention there are certain details of structure, whereby an economical simple and durable structure is obtained.

These objects together with other objects and corresponding accomplishments are obtained by means of the embodiment of my invention illustrated in the accompanying drawing, in which:

Fig. 1 is a side elevation showing a fragment of a wheel equipped with my road bands; Fig. 2 is an elevation of a fragment of the wheel shown in Fig. 1; Fig. 3 is a section as seen on the line 3—3 of Fig. 2 on an enlarged scale; Fig. 4 is an elevation of a fragment of a wheel having three rows of lugs and equipped with another form of my road band; and Fig. 5 is a section as seen on the line 5—5 of Fig. 4 on an enlarged scale.

Referring more particularly to Figs. 1, 2, and 3, a common type of traction wheel is disclosed therein comprising spokes 6 and a felloe or rim 7 provided with two rows 8 and 9 of lugs. The lugs in one row are staggered with respect to those in the next row, but the particular arrangement of the lugs is immaterial. In the present instance the road band is of angle form having a vertical leg forming a web and a horizontal leg forming a tread and comprises six sections, the sections being indicated by 10. The radius of curvature of the sections on the inner side is equal to the radius of curvature of the rim 7 so that the band will rest thereagainst when in position to form a complete continuous ring with the web supported by the rim and the outer leg forming a tread. Bolts 11 are passed through the openings in each section, and extend through clips 12 which hook over the edge of the rim as best shown in Figs. 2 and 3. By tightening the nuts on the bolts, the sections of the band are pulled against the inside faces of the lugs and firmly held in position against the rim of the wheel.

It is obvious that the band sections may be placed in position and secured to the wheel, while the latter is resting upon the ground. The tractor may be moved forward an amount sufficient to bring a new section of the wheel into position for attaching another road band section. The tread leg of the band may be made of the width necessary to comply with the law. In most instances this will be less than the width of the wheel. When the wheel is driven upon soft ground, if the tread sinks therein, the lugs 8 and 9 will again become effective in adding traction.

Referring particularly to Figs. 4 and 5 a type of tractor wheel is shown having three rows 14, 15, and 16 of lugs. The road band sections 17 are intended to be placed at the side of the outer row of grousers, there being insufficient room to place the same between the lugs. In this case in order to obtain bearing surface upon the wheel rim 18, ribs 19 forming rim supports are placed on one of the legs as best shown in Fig. 5. Bolts 20 are passed through the road band sections and secured to the opposite side of the wheel by means of clips 21 and nuts. It is obvious that other mechanical ex-

pedients may be resorted to so as to adapt my road band to tractor wheels of various types.

What I claim is:

1. In combination with a tractor wheel having shoes, a road band comprising a sectional ring supported upon the rim of said wheel and having an outer face tread, said ring bearing against the lateral faces of said shoes, and rods to detachably secure said sections to the wheel, each of said rods extending laterally from the sections and engaging the edge of said rim.

2. A road band for wheels having shoes comprising a sectional ring having an outer face tread and rim supporting web, said sections having faces to bear against shoes in a row, and means to fasten said sections to an edge of the rim of the wheel and draw said sections against the shoes and the rim of the wheel.

3. A road band for wheels having shoes comprising a sectional ring having an outer face tread and an inner rim bearing face, said sections having faces to bear against shoes in a row, rods extending laterally from said sections, and means to detachably secure said rods to the edge of the rim of the wheel whereby said sections are drawn against the shoes.

4. A road band for wheels having shoes comprising a sectional ring having an outer face tread and an inner rim bearing face, said sections having faces to bear against shoes in a row, rods extending laterally from said sections, clips to hook over the rim of the wheel and nuts to secure said rods to said clips whereby said sections may be drawn against the shoes.

In witness that I claim the foregoing I have hereunto subscribed my name this 26th day of November, 1923.

HARRY R. SCHROEDER.