

# PATENT SPECIFICATION

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310,052

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## COMPLETE SPECIFICATION.

### Improvements in Endless Tracks for Motor Vehicles.

I, ADOLPHE KEGRESSE, a Citizen of the French Republic, of 156, rue Armand Silvestre, Courbevoie (Seine), France, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

10 In the known metal-and-rubber endless tracks for motor vehicles the band which forms the core of the belt and effects traction serves also as a track for the rollers, which latter damage the band by rolling upon it.

15 This invention comprises an endless track for motor vehicles which is characterised by a track for the rollers which is independent of the endless strips providing for the traction, and forms the core of the

20 belt.  
Two embodiments of the invention are shown by way of example in the appended drawings.

25 Figure 1 is an elevational view of the preferred device.

Figure 2 is a cross-section of said device on the line A, B, C of Figure 1, and

30 Figure 3 is a cross-section of a modification.  
1 designates the rollers throughout the Figures.

35 The belt consists of two endless strips 2 providing for the traction of the motor vehicle and arranged parallel with each other, a space being left free between them.

40 Arranged crosswise of the strips and in contact with one another, are plates 3 by which the two endless strips are connected to each other and are maintained in the desired space relation. To this end, the endless strips 2 are secured upon the plates 3 by means of bolts 7 which, at the same time, hold the positive drive prongs

45 8 in position upon the endless bands. The rows of prongs 8 occupy only part of the width of the endless strips 2. The surfaces which remain free (Figures 2 and 3) serve as a bearing surface for the belts upon the pulleys on which the structure is supported. The driving pulley 9 (Figure 1) is formed with recesses 12 (Figures 1 and 2) fitting the prongs 8.

55 Arranged between the endless strips 2 is the guiding means which may consist of a U-shaped member 5 cast integral with the plates 3 or secured thereto (as shown in Figure 2) for instance by means of rivets or bolts 10.

60 In the modification shown in Figure 3, the guiding means consists of one single rib 6 either cast integral with the plate 3 or secured thereto by known means.

65 Arranged upon the opposite face of plates 3 are the ground blocks 4 of plastic material.

70 The track for the rollers 1 is provided in the case of Figure 2 by the inner part of the U-shaped member. The dimension of the base of the U-shaped member, lengthwise of the belt, is equal to the length of a ground block 4, as may be seen by reference to Figure 1, and thus the ends of the base of two adjacent U-shaped members engage each other, where- by the rollers may move without impact from one belt element upon the other.

75 In the modification shown in Figure 3, the track for the rollers on either side of the guiding rib 6, is provided by the plates 3 themselves. The dimension of the plate 3 is the same as before, so that on even ground a smooth surface is formed which allows the rollers to move without any jar from one element of the endless track to the next.

80 In order to obtain noiseless running, the track for the rollers may be covered with a layer of rubber or a similar non-metallic material. Also, it may be provided with one or more endless strip elements, for instance of rubberised fabric.

85 The guiding of the belt in the supporting pulleys is provided for, as shown in Figure 2, by the outer portion of the U-shaped member 5 guiding the rollers. In Figure 3, the guiding in the pulleys is afforded by the central rib 6, as in known endless tracks.

90 In Figure 2, the endless strips 2 bear laterally against the lower portion of the outer face of the flanges 5 of the U-shaped member whereby foreign matter is prevented from passing in between the strips 2 and the guiding U-shaped member 5. The effect of this feature is that the

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general structure of the belt is strengthened by preventing the plates from assuming a diagonal position.

As may be seen from the above description, the endless strips which effect the traction of the belt are no longer subjected to the destructive effects of the rollers and thus remain much longer in service.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. An endless track for motor vehicles, characterised by a track for the rollers which is independent of the endless strips providing for the traction, and forms the core of the belt.

2. In the endless track according to Claim 1, the features that:—

a) the rollers run within a U-shaped member permanently secured upon the bearing plates for the ground blocks and arranged between the two endless strips by which the traction of the belt is provided for; or

b) the track for the rollers between the endless strips is arranged on either side of the central guiding rib integral with the metal plates which carry the ground blocks;

c) the external faces of the U-shaped member for guiding the rollers serve as guides over the supporting pulleys;

d) the inner sides of the endless strips bear against the guiding U-shaped member;

e) the track for the rollers is provided with one or more cushioning strip elements which are completely independent of the endless strips which form the core of the belt and whereby the traction of the belt is provided for;

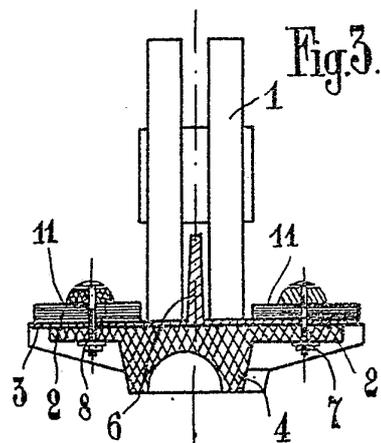
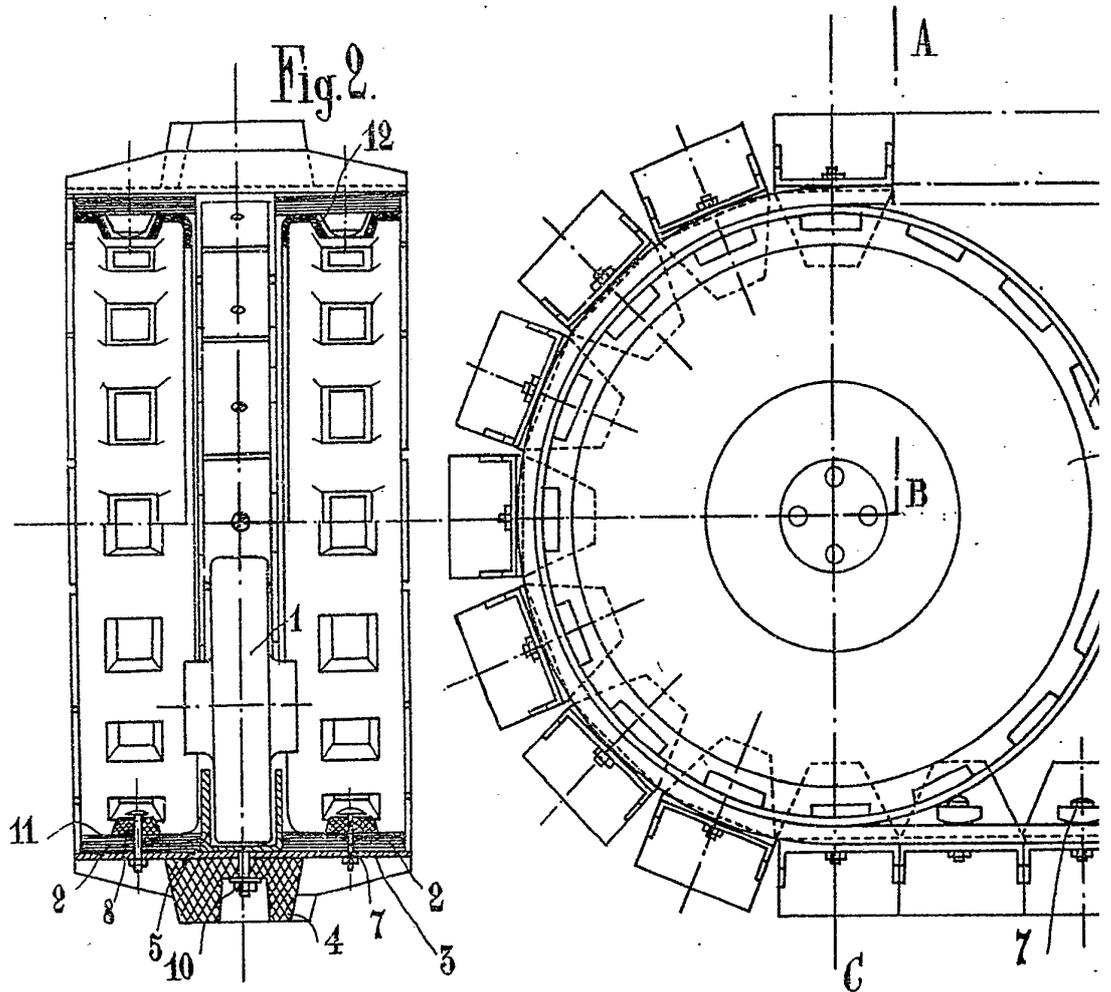
f) the two rows of prongs are each secured upon an endless strip, bearing surfaces being left on said strips on either side thereof so that the strip may be supported upon the supporting pulleys.

3. The endless track for motor vehicles substantially as described or substantially as illustrated in the accompanying drawings.

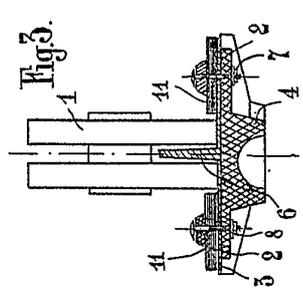
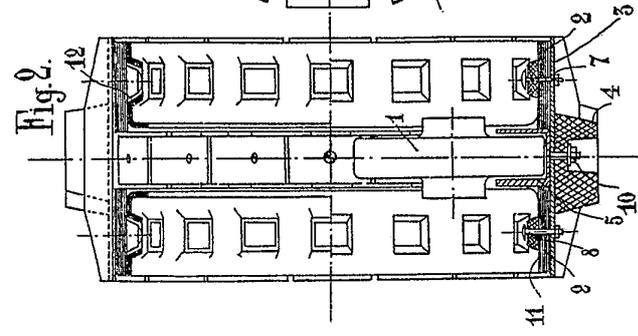
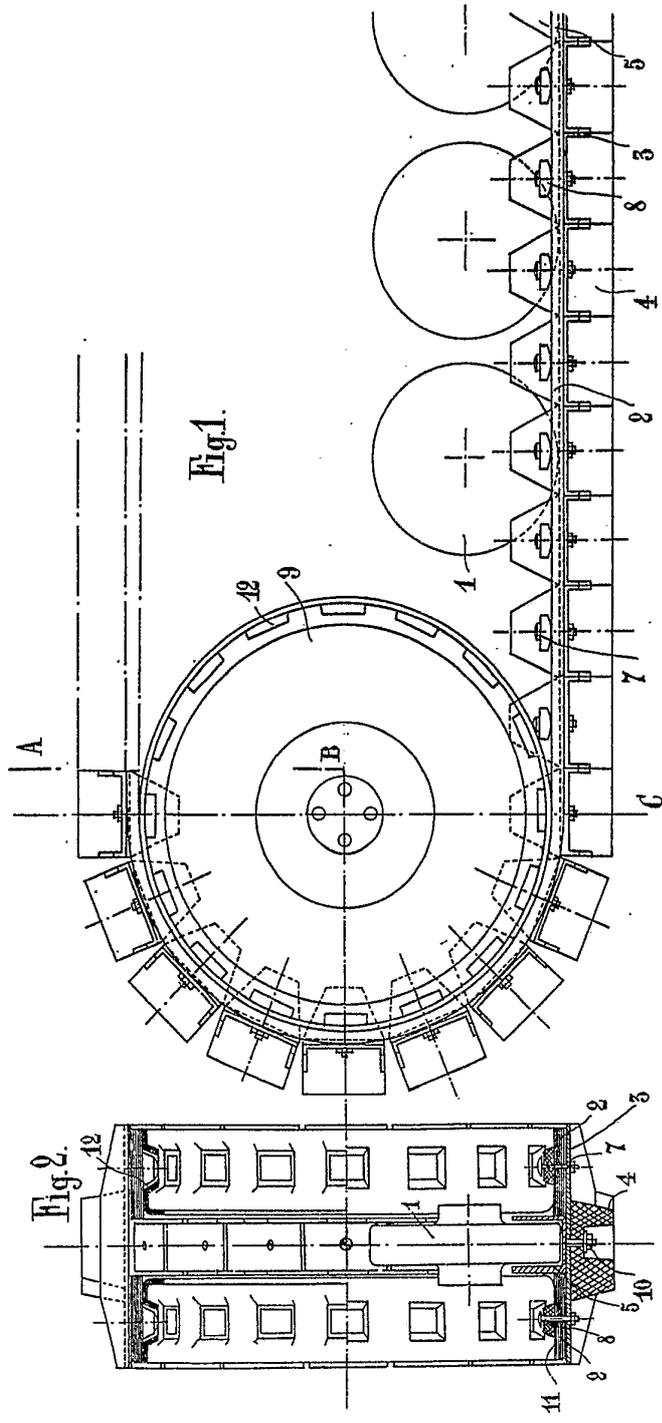
Dated this 18th day of April, 1929.

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*[This Drawing is a reproduction of the Original on a reduced scale.]*







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