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PATENT



SPECIFICATION

*Application Date, June 15, 1916. No. 8463/16.*

*Complete Accepted, May 24, 1917.*

COMPLETE SPECIFICATION.

Improved Track Belt for Motor Vehicles.

I, ADOLPHE KÉGRESSE, of Imperial Garage, Czarskoie Selo, Russia, Technical Manager of the Imperial Garage, 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:—

5 Track belts used at present in motor vehicles mostly consist of metal bands composed of a series of links of more or less complicated construction. These metal belts of whatever type they may be, have necessarily no great degree of suppleness; further they are also necessarily noisy, heavy, without any elasticity and it is not an easy matter to drive them. All those drawbacks do  
10 not allow of such belts being used on vehicles which have to be run at a more than moderate speed.

It is not an easy matter to invent an ideal track belt, and the present inventor has spent many years of laborious experiments before achieving the object of this invention which is an improved track belt having all the qualities which  
15 are required.

This invention will now be more particularly described with reference to the accompanying drawings which illustrate one form of the improved track belt. In these drawings:

Fig. 1 is a side elevation of a part of the belt.

20 Fig. 2 is a cross section on the line A B of Fig. 1.

Fig. 3 is a plan of a portion of the improved belt.

As shown, the improved belt is composed of rubbered fabrics. It comprises two flat portions 1, 1, constituting the general base of the belt, a central  
25 portion 2 composed of a series of rectangular blocks having a semi-conical shape in one direction (that shown in Fig. 2), and conical in the other direction (shown in Fig. 1), two continuous projecting tread portions 3, 3, made of rubber, and suitable soil-gripping projections 4 (Fig. 3) more particularly suitable for use on soft ground.

Each of the parts 1, 2, 3 and 4 is designed to effect a separate and determined  
30 object.

The improved belt rests with its flat portions 1, 1, on the driving wheels. These flat portions also engage with the guide rollers that distribute the load over the driving stretch of the belt.

The blocks 2 are designed to guide the belt and to prevent it from slipping  
35 off the driving wheels, which are provided with suitable grooves, in the turning movements of the vehicle. These blocks 2 are semi-conical as shown in Fig. 2, in order to prevent the belt from being cut through at the points *a, a*, if the belt should happen to pass with its centre over a hard body such as a stone, repre-

[Price 6d.]



sented in Fig. 2 by an arrow *b*. In such a case the conical parts *c*, *c* which have a tendency to enter more deeply into the grooves of the driving wheels or pulleys, bear normally against the inner sides of the said wheels or pulleys and thus avoid the cutting above referred to. Further, the wheels or pulleys which are shaped to correspond with the shape of the belt, facilitate by reason of their conical groove, the entry of the blocks 2. These blocks have another conical face for the purpose of ensuring the suppleness of the belt mainly during the passage of the latter over the wheels or pulleys, as shown in Fig. 1.

The blocks thus formed may also allow of driving the belt directly by toothed wheels.

The projecting tread portions 3 act in a certain way as rails; they ensure the continuity of the rolling motion notwithstanding the variously shaped driving projections fixed between them. Further, they form an elastic buffer between the ground and the bearing parts of the wheels or pulleys and rollers. On hard ground such as a road for instance, they prevent the outer flat portions from being prematurely worn out.

The purpose of the projections 4 is obvious; they serve to provide a bearing upon soft ground. In fact when the lower horizontal surface of the tread portions and the projections is not sufficient to grip the ground over which the vehicle is travelling, the belt will sink in until the flat portions also take their share in bearing the load. In this case the projections leave upon the ground impressions which will prevent the belt from slipping. The part 5 (Fig. 2) of these projections has in cross section a peculiar external shape which commences from the general level of the belt and curves round up to the adjacent tread portion. This detail is of importance because it allows of the belts side-slipping over the ground in the turning movements of the vehicle.

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. A track belt for motor vehicles, comprising:—Two flat portions adapted to bear upon the driving wheels or pulleys, and to engage with supporting rollers; blocks that are semi-conical on one face and conical on the other, designed for guiding the belt and causing it to work normally under certain conditions whilst imparting to it the necessary suppleness; two outer tread portions of resilient material for absorbing shocks when the vehicle is travelling over hard ground, and for assuring the continuity of the rolling whilst preventing the flat portion from premature wear; and soil-gripping projections of any suitable shape for preventing the belt from slipping on soft ground and for facilitating to a certain extent by their end portions the side-slipping of the belt in turning movements of the vehicle.

2. The improved track belt, constructed and operating substantially as hereinbefore described and also as illustrated in and by the accompanying drawings.

Dated this 15th day of June, 1916.

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Fig. 2.

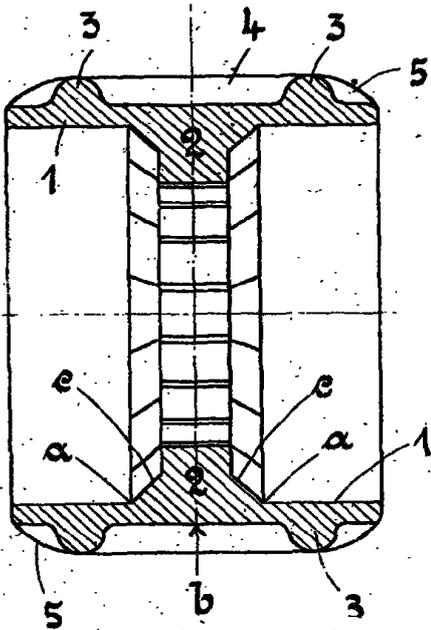


Fig. 1.

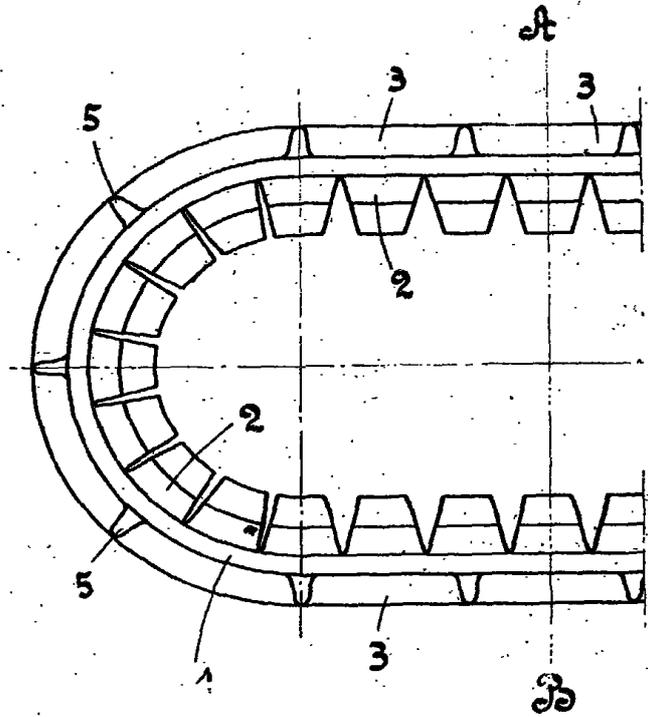
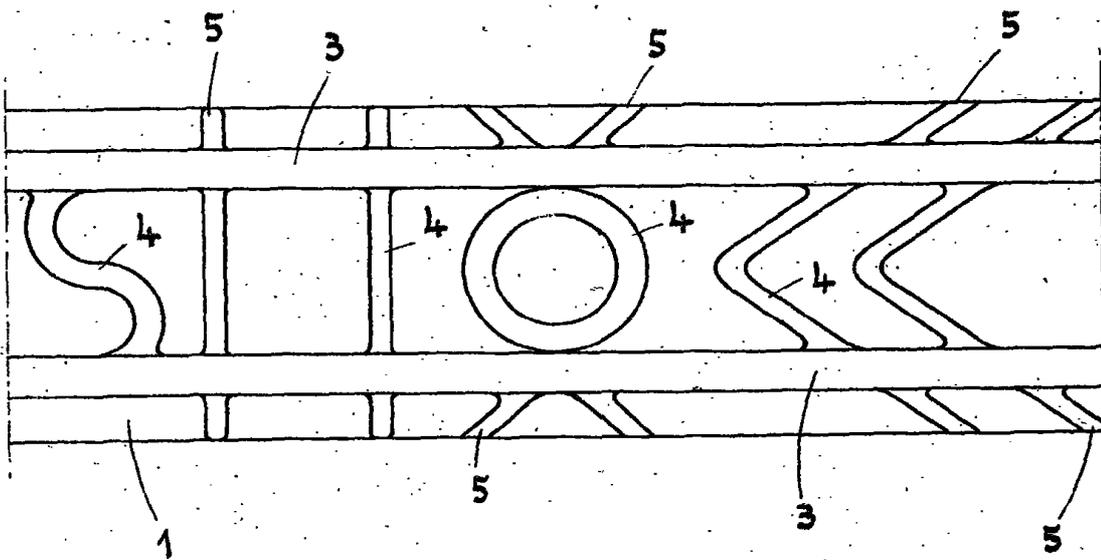


Fig. 3.



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