PATENT SPECIFICATION

Convention Date (France) : Dec. 13, 1934.

450,384

Application Date (in United Kingdom) : Dec. 12, 1935. No. 34497/35.

Complete Specification Accepted : July 16, 1936.

COMPLETE SPECIFICATION

Improvements in Flexible Mountings for carrying Rollers on Endless Track Vehicles

I, ADOLPHE KEGRESSE, a French Citizen of 48, Rue Du Theatre, Paris (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:—

In Specification No. 413,490 of the 13th July, 1932, is described a flexible mounting for the equaliser of a train of rollers on one of the parts adjoining the chassis of the vehicle.

This resilient mounting although it gives good results in practice is incomplete.

In fact, if a unit formed by a carrying train bogie having two rollers is considered, it will be seen that the rollers are mounted rigidly on the equaliser or equalisers connecting them, so that, on imperfectly flat ground, the rollers do not bear on the endless track throughout the entire width of their rim. This results in unavoidable overloads, tending to create wedging which is very harmful to the track, especially when the latter is made of rubberised fabric.

In other words, the roller does not work normally to the ground and its axis almost always makes a more or less pronounced angle with the latter.

The present invention relates to a flexible mounting for the carrying rollers of the oscillating equalisers of endless-track vehicles which enables the rollers to work normally to the ground.

According to the invention such a flexible mounting is characterised in that the axles of the rollers are held in the equaliser which carries them by means of an intermediate member which is flexible and resilient in all directions to a limited distance, the said equaliser being itself mounted resiliently.

In the accompanying drawing by way of example:—

Figure 1 shows in sectional elevation along the line A—B of Figure 2, a construction of the invention.

Figure 2 is a profile view of such a unit sectioned on line C—D of Figure 1.

In the Figures, the carrying train is a system of double rollers connected in pairs by means of two like equalisers disposed on the exterior of the rollers.

The rollers 1 (Figures 1, 2) of the carrying train are connected to the equaliser 2 (Figure 1). The latter is mounted on the machine by means of resilient blocks 3 for example of rubber (Figure 1) housed in the said equaliser 2. A cross-shaped part 4 (Figure 1) secured to a part 5 fixed or pivoted to the vehicle separates the blocks 3 from each other.

The equalisers 2 terminate at each of their ends in a cylindrical part or trunnion 6 which carries a sleeve 7 of flexible material fixed on the trunnion 6 (Figures 1, 2).

The external part of the sleeve 7 is forcibly fitted in a head 8 (Figure 1) secured to the axle 9 of the rollers 1.

In the Figures, the resilient sleeve 7 is shown above the axis of the rollers. It is evident that it may instead be below the said axis, or even in line therewith, without in any way altering the idea of the invention.

It will be seen from this description that the rollers connected to their equaliser by a flexible coupling can remain constantly parallel to the ground to the extent permitted by the resilient systems 3 and 7. It should be remarked that in the very considerable unevennesses of the ground, the deformation of the system will be limited resiliently by the compression of the plastic materials 3 and 7.

The system described and shown in the Figures may be applied to any carrying system having rollers mounted on oscillating equalisers, the axles of the rollers being always adapted to be connected to their support according to the invention. That is to say, the device described may be applied equally well both to single equaliser systems having external rollers and to double equaliser mountings as described.

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:—

[Price 1/-]

1. A flexible mounting for the carrying rollers of the oscillating equalisers of endless track vehicles, characterised in that the axles of the rollers are held in the equaliser which carries them by means of an intermediate member which is flexible and resilient in all directions to a limited distance, the said equaliser being itself mounted resiliently.

2. A mounting as claimed in claim 1, characterised in that the axle of the supporting rollers is fixed in a block whereof the upper part forms a sleeve for accommodating a trunnion forming the end of the equaliser with the interposition of a resilient lining allowing the block to make a limited movement on the trunnion.

3. A flexible mounting for carrying rollers on endless track vehicles substantially as described or shown in the accompanying drawings.

Dated this 12th day of December, 1935.

Adolphe Kegresse,
Per: BOULT, WADE & TENNANT,
111/112, Hatton Garden, London, E.C.1.,
Chartered Patent Agents.

Leamington Spa: Printed for His Majesty's Stationery Office, by the Courier Press.—1936.

Fig. 1.

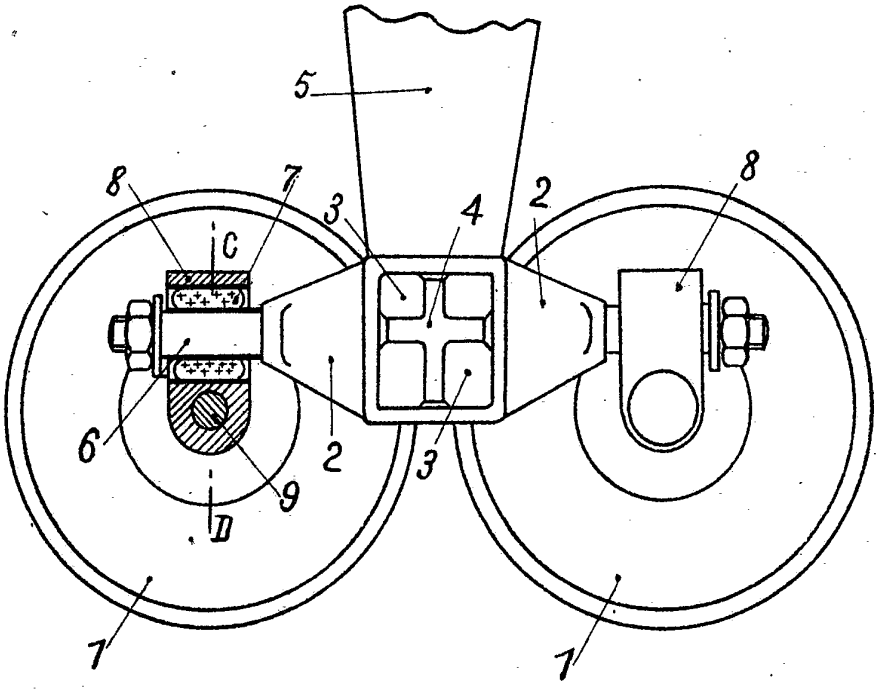
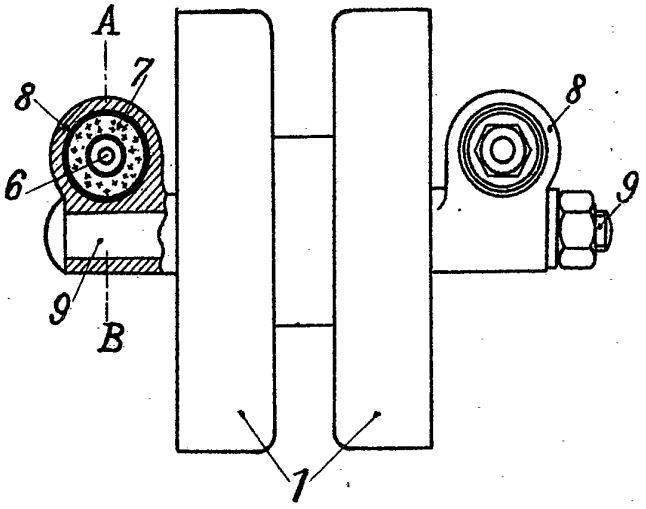


Fig. 2



Malby & Sons, Photo-Lith.