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PATENT SPECIFICATION

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(54) PLATFORM ASSEMBLIES FOR MOTOR VEHICLES

(71) I, PAUL LEGUEU, of French nationality, of 85 Avenue de Mazy, 44380 Pornichet, France, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to platform assemblies for motor vehicles, more particularly for long-range vehicles, for example for use in vast desert regions.

The difficulties of having access to adequate provisions of water or fuel for vehicles in use for example in desert regions make it necessary to provide for substantial reserves, which are generally stored in jerricans carried within the vehicle. Besides the disadvantage of the weight of such cans, the space which they occupy substantially reduces the space available in the vehicle, to the detriment of other products or goods of which there will therefore be a risk of subsequent shortage. Moreover, the jerricans must generally be secured in place, for example to prevent them knocking against each other or tipping over, and this operation takes time.

According to the present invention, there is provided a platform assembly for a motor vehicle, comprising a platform that includes two longitudinal members, a first tank disposed between the longitudinal members, the tank extending over at least a substantial part of the length of the platform assembly, and at least one respective second tank on each outer side of the longitudinal members and suspended by elongate flexible connecting means.

A platform assembly for a motor vehicle, according to the invention, will now be described by way of example with reference to the accompanying drawings, in which:—

Figure 1 is a side view of the platform assembly with a body cage,

Figure 2 is a view of the rear of the platform assembly of Figure 1, that is, as viewed from the right of Figure 1,

Figure 3 is a plan view from above of the platform assembly, the body cage having been omitted for the sake of clarity of the drawing,

Figure 4 is a side view of a water tank of the platform assembly,

Figure 5 is a view of the water tank from the left of Figure 4.

A platform assembly or floor assembly for a motor vehicle comprises a platform including profiled metal members 1 which are so shaped and assembled as also to define wheel arch openings 2 of which one is shown in Figure 1. The members 1 support fixed rails 3 upon which are secured canvas-support hoops 4 which are connected together by securing tubes 5, to form a body cage on which e.g. a canvas cover can be fitted.

In its rear part the platform assembly carries a drop-down rear door 6 which is mounted pivotally on pivots 7. The door 6 is strengthened by vertical strengthening members such as 8. The members 1 forming part of the platform are connected to two welded longitudinal members 9 which are also part of the platform and which extend parallel to each other in the longitudinal direction of the platform. The platform assembly also includes a tank 10 e.g. for water, disposed in the space between the two longitudinal members 9. As shown in Figure 3, the tank 10 extends over at least a substantial part of the length, and preferably almost the whole thereof, of the platform. The tank 10, which is preferably of large capacity, is suspended below the platform by elongate flexible connecting means such as straps (not shown), which are passed through connectors such as loops or eye members 11 secured e.g. by welding to the longitudinal sides of the tank (Figure 5), at the periphery thereof. To immobilise the tank in relation to the members 9 and to prevent friction between the tank and the straps, for resisting frictional wear of the straps and rupture thereof, packing members of a resilient material such as

neoprene, rubber or a rubber-like material are interposed between the tank and the straps.

As shown in Figure 4, the tank 10 is of a stepped construction comprising a first portion A of small thickness in a vertical direction but of large surface area, a second portion B whose height is substantially greater than, for example double, the height of the portion A, and a third portion C which forms a discharge spout portion of the tank 10. A tap 12 and a drain orifice 113 are provided at the bottom part of the spout portion.

The tank 10 also comprises a cover 13 which extends over the whole of the surface area of the tank, the cover 13 being secured to a peripheral rim portion 14 at the upper edge of the tank 10 by means of screws 15, with an interposed sealing gasket 13. The cover 13 is removable, to permit access to the tank interior for example for questions of hygiene such as cleaning. The tank 10 also comprises, on one of its longitudinal sides 16, a filling pipe 17 (Figure 3) which can be closed by a safety stopper or cap 18. The filling pipe 17 opens into the tank 10 in the uppermost part thereof, as can be seen in Figures 4 and 5.

Suspended on each side of the water tank 10, on each outer side of the members 9, is a respective tank 19, preferably of large capacity, for example for fuel. Each tank 19 is fixed to the platform by elongate flexible connecting means such as straps 20 which, like the tank 10, are passed through connectors such as eyes or loops, with interposed packing members, similarly as described above for the tank 10. The two tanks 19 are clearly visible in Figure 3 and extend from the front face of the platform assembly as far as the front of the wheel arch openings. These tanks 19 are filled at their sides by way of filling pipes 21 which can be closed by respective safety caps 22.

The main portion of the vehicle platform or bed is secured laterally with respect to the longitudinal members 9 by brackets 23 which are welded into place, the spacing of which corresponds to the distance between the two longitudinal members 9. Thus, the brackets 23 are imprisoned by the longitudinal members 9 which act as lateral locking abutments.

The above-described platform assembly comprising the platform with incorporated water and fuel tanks obviates the need for example for reserve jerricans to be stored within the vehicle, which would affect the load-carrying capacity of the vehicle. The vehicle equipped with such a platform assembly will thus enjoy a high degree of

autonomy in respect of fuel and water, thus enhancing its utility in regions such as desert country. In addition, using the means such as the steps for suspending the tanks and using neoprene or rubber-like packing members, makes it possible to at least reduce noise which might otherwise be generated by such tanks rubbing against parts of the platform assembly during movement of the vehicle, and ensures that the tanks can be firmly strapped in place.

WHAT I CLAIM IS:—

1. A platform assembly for a motor vehicle, comprising a platform that includes two longitudinal members, a first tank disposed between the longitudinal members, the tank extending over at least a substantial part of the length of the platform, and at least one respective second tank on each outer side of the longitudinal members and suspended by elongate flexible connecting means.

2. A platform assembly according to claim 1 wherein the first tank is fixed between the longitudinal members by elongate flexible connecting means passing through connectors at the periphery of the tank.

3. A platform assembly according to claim 1 or claim 2 wherein resilient material packing members are disposed between the connecting means and the respective tanks.

4. A platform assembly according to claim 3 wherein said packing members are of neoprene.

5. A platform assembly according to any one of the preceding claims wherein said connecting means are straps.

6. A platform assembly according to claim 2 or any claim appendant thereto wherein the first tank is closed upwardly by a removable cover.

7. A platform assembly according to any one of the preceding claims wherein the first tank is of a stepped form, the lower portion being at the rearward end of the platform assembly and being provided with a discharge tap.

8. A platform assembly according to any one of the preceding claims wherein a floor portion of the platform, which is supported by the longitudinal members, has welded brackets, the distance between which corresponds to the spacing between the two longitudinal members.

9. A platform assembly for a motor vehicle, substantially as hereinbefore described with reference to the accompanying drawings.

10. A motor vehicle including a platform assembly according to any one of the preceding claims.

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neoprene, rubber or a rubber-like material are interposed between the tank and the straps.

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15 The tank 10 also comprises a cover 13 which extends over the whole of the surface area of the tank, the cover 13 being secured to a peripheral rim portion 14 at the upper edge of the tank 10 by means of screws 15, with an interposed sealing gasket 13i. The cover 13 is removable, to permit access to the tank interior for example for questions of hygiene such as cleaning. The tank 10 also comprises, on one of its longitudinal sides 16, a filling pipe 17 (Figure 3) which can be closed by a safety stopper or cap 18. The filling pipe 17 opens into the tank 10 in the uppermost part thereof, as can be seen in Figures 4 and 5.

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