Jan. 1, 1935. A. P. KARSIKAS 1,986,399

FOOT REST

Filed Aug. 9, 1933

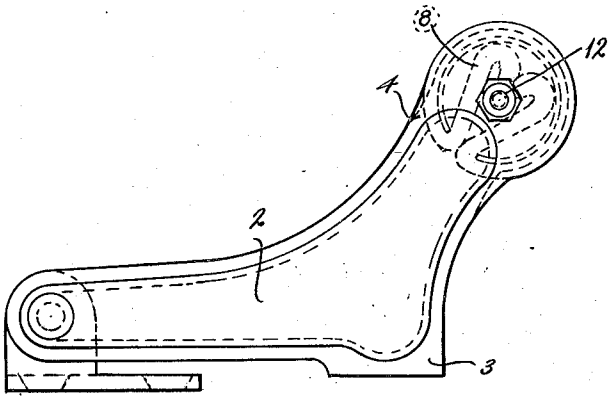



Fig. 1

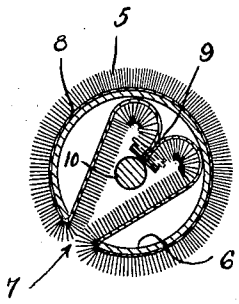



Fig. 3

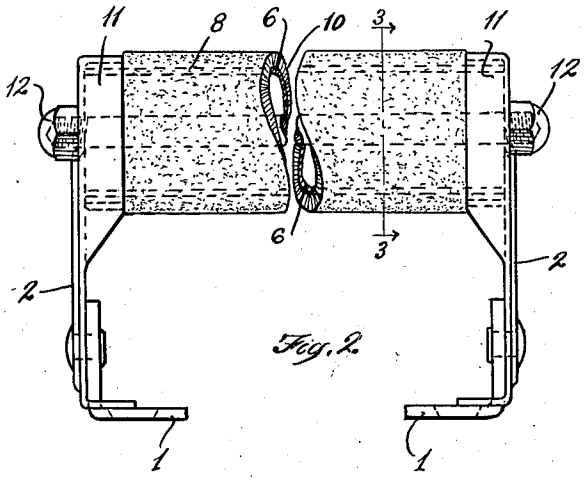



Fig. 2

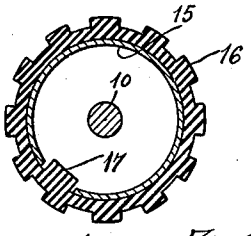



Fig. 6

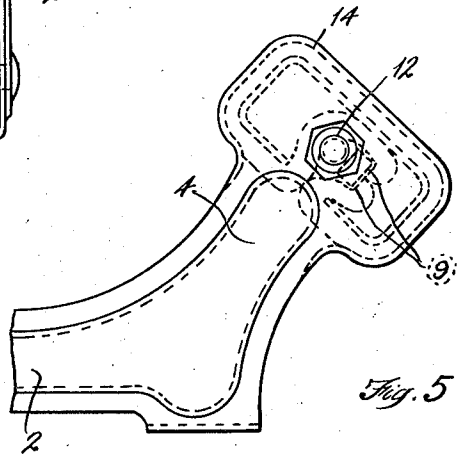



Fig. 5

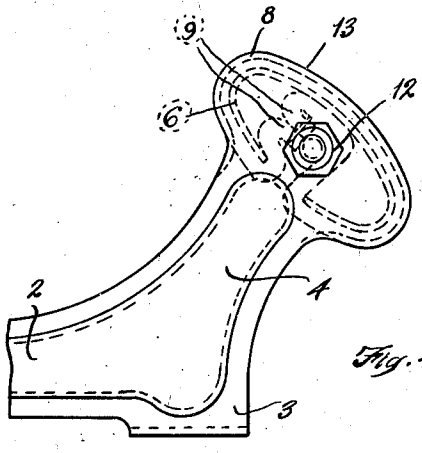



Fig. 4

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## FOOT REST

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Application August 9, 1933, Serial No. 684,373

9 Claims. (Cl. 155—169)

This invention relates as indicated to foot rests and more particularly to a foot rest designed for use in automobiles and the like.

It is among the objects of this invention to provide a foot rest of the character described which is characterized by its neatness of appearance, rigidity of construction, durability in use, ease of assembly and low cost of manufacture.

It is a further object of this invention to provide a foot rest of the character described which has the inherent strength of a truss without offering any material obstruction on the floor of the vehicle either when in position for use or when folded out of the way and not used.

It is a further and more particular object of this invention to provide a foot rest in which the foot rail is covered by some suitable material such as carpet and in which such covering material is secured by means not apparent on the face of the rail and which is particularly desirable from the standpoint of the facility of assemblage, as well as the secure manner in which the covering is held on the rail.

Other objects of this invention will appear as the description proceeds.

To the accomplishment of the foregoing and related ends, said invention, then consists of the means hereinafter fully described and particularly pointed out in the claims.

The annexd drawing and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing:—

Fig. 1 is an end elevational view of a foot rest constructed in accordance with the principles of this invention; Fig. 2 is a broken side elevational view of the device as illustrated in Fig. 1; Fig. 3 is a transverse sectional view of the rail portion of the device as illustrated in the previous figures taken on a plane substantially indicated by the line 3—3 in Fig. 2; Fig. 4 is a fragmentary, end elevational view of a foot rest similar to that illustrated in Fig. 1 but characterized by the employment of a slightly different type of foot rail; Fig. 5 is a fragmentary, side elevational view of a foot rest showing yet another type of rail construction; and Fig. 6 is a transverse sectional view similar to Fig. 3 but showing a different form of covering for the rail.

Referring now more specifically to the drawing and more especially to Figures 1 and 2, the foot rest comprising this invention includes the usual bracket members 1 adapted to be bolted or similarly secured to the floor of vehicle body and to these bracket members 1 are pivotally secured side members 2.

As viewed in Fig. 1, the side members 2 are provided with feet 3 which, when the foot rest is in position for use on the floor of the car, rest on such floor or more specifically, the covering thereon, to support the forward end of the rest in the vicinity of the rail. The side members 2 have extensions 4 arranged angularly to the body thereof and it is between these angular extensions that the rail presently to be described is secured in the manner hereinafter more fully explained.

The rail, generally indicated at 5 in Figures 1 to 3 consists of a substantially cylindrical body member 6 which is provided with a slot or opening 7 extending substantially throughout the entire length of such body and along one side.

For purposes of convenience in describing the rail member illustrated in the several figures in the drawing, the body portion of the several types of construction will be referred to as a channel-shaped member and it is, therefore, to be understood that by the term "channel-shaped member" is meant any suitable variation of the cross-sectional form of the types chosen for purposes of illustration and that the invention applies to any type rail in which the body member is provided with a longitudinal opening along one side into which the covering may be inserted and within which the same may be secured in the manner hereinafter more fully explained.

As most clearly illustrated in Fig. 3, the rail 5, or more specifically the body portion 6 thereof, is encompassed by a close-fitting sleeve 8 of any suitable covering material such as carpet, fabric and the like. The covering member 8 is in the form of a sleeve such as may be produced by folding over a rectangular piece of suitable material and then sewing or similarly securing together, as at 9, the longitudinally contiguous edges of the covering. After the covering has been so circularized, i. e., the longitudinal edges thereof secured together, it is assembled on the body member 6 by first folding into substantially the form illustrated in Figure 3 and then telescopically engaging the same with the body member.

After the covering and body member are so assembled there is, of course, a certain amount of looseness of the covering with respect to the body which is necessary for ready assembly. After the parts have been so telescopically assem-

bled, however, the same are held in assembled relation by means of a rod 10 which is passed axially through the body member 6 and holds the reentrant folded and secured edges of the covering from coming out of the opening or longitudinal slot 7. Not only does this rod prevent the parts from becoming relatively dissembled but it also exerts sufficient tension on the folded portion of the covering within the body so that the covering is drawn taut on the outer periphery of the body.

The angular projections 4 of the side members 2 are provided with cylindrical recesses generally indicated at 11 into which the ends of the carpeted or covered rail may be snugly fitted. The inner diameter of these recesses will be such as to receive in compression the ends of the carpet or covering overlying the rail so that the edges of the covering are protected against excessive wear and fraying.

The rod 10 employed for the purpose of retaining the covering on the rail is the same means which is employed for the purpose of maintaining the side members and the rail proper in assembled relation by passing through the side members 2 and threadably receiving securing nuts 12.

As previously indicated, the cross-sectional form of the rail portion of the device may assume any desired shape such as the elliptical form 13 illustrated in Figure 4 and the rectangular form 14 illustrated in Figure 5. In each of these several forms of modifications similar parts will be designated by similar reference characters employed in the description of Figures 1 to 3 in order to avoid duplication of explanation.

In Figure 4 the rail portion comprises a substantially elliptical body member which, along one side, is provided with an opening to receive the carpet or covering which is folded over and inserted similarly to the manner in which the covering was inserted as explained in connection with Figure 3. The folded over portions of the covering adjacent the longitudinal contiguous edges which are secured together may, in the construction such as illustrated in Figure 4, be positioned slightly differently relatively to the rod 10 and the opening 7, such different positions usually being dictated by the limited space within the metallic body of the rail. The only point which must be carefully kept in mind in the proportion of the various parts forming the assembly is that the loop of material within the body of the rail be such that when engaged by the rod 10, the material on the surface of the body will be drawn taut.

In Figure 5, a further modification of the rail, particularly its cross-sectional form, has been illustrated but as previously indicated, the principles of construction are substantially identical with those disclosed in and described in connection with the previous figures.

In Figure 6 there is illustrated a form of rail construction embodying a slotted body portion 15 encompassed by a rubber sleeve 16, such sleeve provided with an axially extending projection 17 on its inner periphery adapted to extend into the slot in the body 15. As above indicated, the sleeve 16 is made of rubber or any other suitable moldable composition and when made of rubber or some material having flexibility, the molded inner diameter of the sleeve may be slightly less than the outside diameter of the body 15 so that when the two parts are telescopically engaged, the sleeve 16 will snugly grasp the body 15 and the rib 17 will prevent relative rotation between the two parts. It is to be understood that the sleeve 16 need not be composed entirely of rubber but may have imbedded therein layers of fabric or like material for the purpose of strengthening and reinforcing the same.

The construction of a rail according to the principles of this invention is particularly desirable for various reasons which may be briefly enumerated as follows:—There are no means apparent on the surface of the rail whereby the covering is secured thereon and accordingly, it is possible to produce a construction which is more highly decorative than those which rely upon external means for securing the covering.

The manner in which the several parts are initially prepared and ultimately assembled is extremely simple requiring no special apparatus and accordingly the device may be constructed at a minimum of cost. The employment of the rod which extends through the hollow rail produces an assembly which, from a structural standpoint, has the usual attributes of strength found in a truss so that an extremely rigid and durable assembly results from a light weight construction.

Other modes of applying the principle of this invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any of the following claims or the equivalent of such stated means be employed.

It is therefore particularly pointed out and distinctly claimed as this invention:

1. In a foot rest of the character described, the combination of spaced bracket members; a foot rail extending between said bracket members and comprising a body member provided with a longitudinally extending opening along one side thereof, a sleeve cover for said body closely fitted about the same and extending into said opening, a securing member outside said cover and extending longitudinally of said body within said opening, and means engaging said securing member and clamping said bracket members against said body member.

2. In a foot rest of the character described, a foot rail comprising an elongated body member provided with a longitudinal opening along one side thereof, a sleeve cover for said body closely fitted about the same and having a fold thereof extending into said opening, a securing member extending longitudinally of said body member within said opening and within said fold, caps encompassing said cover and said body member at the ends thereof, and means securing said caps to said securing member.

3. In a foot rest of the character described, the combination of spaced bracket members, a foot rail comprising a channel-shaped body member, a sleeve of covering material around said body and depressed into the opening of said channel member, and means extending longitudinally of said body in said opening securing said covering in said channel, and means engaging said last-named means and clamping said brackets to said body member.

4. In a foot rest of the character described, a foot rail comprising a body member provided with a longitudinally extending opening along one side thereof, a sleeve of covering material around said body member and extending into said opening, a securing rod extending longitudinally of said body member within said opening, engaging said sleeve to secure the same in close-fitting engagement on said body and means se-

curing said rod in fixed relation with said body member.

5. In a foot rest of the character described, a foot rail comprising a substantially cylindrical body member provided with an axially extending slot in the wall thereof, a covering for said body member closely fitting about the same and extending along connected opposite edges into said slot, means extending axially of said body within the same and securing said covering thereon and means securing said first-named means in fixed relation with said body member.

6. In a foot rest of the character described, the combination of spaced bracket members, a foot rail arranged between said bracket members and comprising a substantially cylindrical body member provided with an axially extending slot in the wall thereof, a covering for said body closely fitting about the same and extending along connected opposite edges into said slot, and a rod extending axially through said body securing said covering thereon and means securing said rod in fixed relation with said bracket members.

7. In a foot rest of the character described, the combination of spaced bracket members, a foot rail extending between such brackets and comprising a body member provided with a longitudinally extending opening along one side thereof, a sleeve cover member closely fitting about said body member and having a part extending into said opening, means extending axially through said body member securing said covering thereon, cap-like elements connected with said bracket members closely overlying said covering at the ends of said rail and means engaging said elements and holding said first-named means in fixed relation with said body member.

8. In a foot rest of the character described, a pair of brackets, a foot rail comprising a channel-shaped member, a substantially rectangular strip of carpet folded about said body in closely fitting engagement and with its longitudinal edges secured together and inserted in the opening of said channel member, and a rod extending axially through said body member engaging the loop formed by the secured edges of the carpet securing the same on said body member, said rod engaging said brackets and having means clamping the brackets against the body member.

9. In a foot rest for an automobile, in combination, a pair of brackets adapted to be affixed to the floor of a car, a hollow elongated body member having a longitudinal slot in one wall mounted between said brackets, a sleeve-like covering of flexible fabric snugly fitted on the outside of said body member and having a portion passed through said slot forming a re-entrant loop within said body member, and a rod engaging said brackets and passing through said body member within said loop of fabric, and means holding said rod, said body member and said brackets in fixed relation.

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