Aug. 19, 1930. J. Q. GILL 1,773,482

CAR WALK

Filed July 25, 1929

FIG. 1.

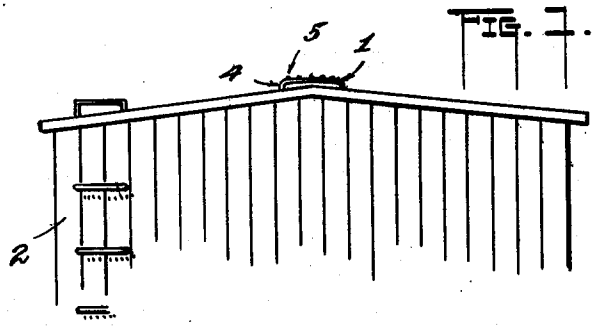


FIG. 2.

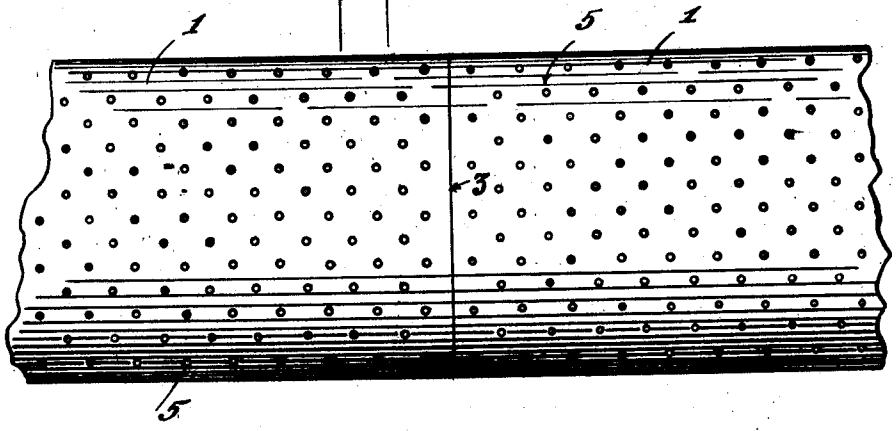
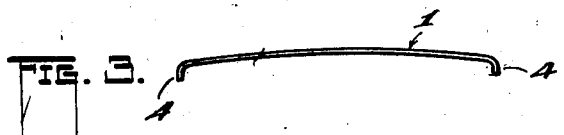


FIG. 3.



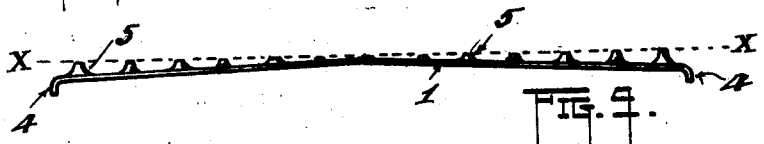


FIG. 4.

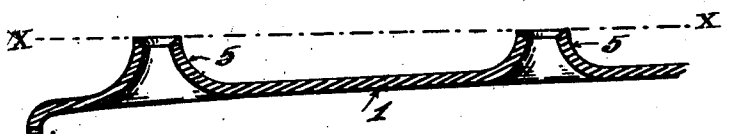




FIG. 5.

Inventor

J. Q. Gill,

By L. M. Denton

Attorney

Patented Aug. 19, 1930 1,773,482

UNITED STATES PATENT OFFICE

JULIUS Q. GILL, OF PEORIA, ILLINOIS

CAR WALK

Application filed July 25, 1929. Serial No. 380,808.

This invention relates to car-walks, or walks mounted on the tops of railway cars designed for the use of trainmen in the performance of their duties.

The whole object of the invention is to provide a metal walk in arch form for readily shedding water, especially required in freezing weather, and which has upstanding extensions or friction portions upon which the trainmen may walk, the same serving to prevent slipping, the free extremities thereof all lying in substantially a common plane.

The appended drawing shows my invention as I prefer to construct it, though subject to minor changes, and wherein:

Figure 1 is an end elevation of part of a railway car showing my invention mounted on the top thereof in the usual position for car-walks.

Figure 2 is a plan of parts of two abutting sections of my improved car-walk.

Figure 3 is an end elevation of the same.

Figure 4 is an end elevation of a slightly modified form of the walk shown on a somewhat larger scale, and

Figure 5 is a transverse section of a part of a car-walk section produced on a much larger scale whereby to better show structural features.

Car-walks usually consist of a single board or two or three narrow boards extending the length of the car and secured to cleats fastened to the car-top. In winter weather the boards being naturally porous hold water which in freezing makes footing quite precarious, and snow on such a walk is hardly less dangerous. Even in mild weather, also, the boards are more or less slippery when wet and not to be relied upon for complete safety. Further, replacement of the boards is constantly require, with attendant danger while in a state of disrepair.

The purpose of my invention is to provide a form of car-walk that will be practically permanent in nature, that is of a form that will readily shed water, and that will present friction portions whose free extremities preferably terminate substantially a horizontal plane spaced from the arch of the walk and with which the shoe-soles can engage in all weathers and under all "underfoot" conditions, thus providing safety for the trainmen at all times.

In Figure 1 of the drawing the character 1 designates as a whole the car-walk of my invention mounted on and secured in any suitable manner to the roof of a car denoted at 2, the other figures illustrating the construction. Figure 2 shows two sections abutting at their ends as at 3.

The walk is preferably made up of stamped or rolled sheet steel sections of the desired length to be abutted end to end as explained, and said sections are arched in a lateral direction. That is to say, in Figure 3 the form is shown as substantially arcuate, its curve being described in this instance only from a common point as a center, while in Figure 4 the downward slant in each direction is in a straight line from the median or middle line, both forms described being open for use, although I may prefer to use the form first described. The side edges of the sections may be flanged as denoted at 4 and these may rest upon the car's top or may be supported by suitable footings, not shown, or the sections may be supported in other ways not necessary to illustrate herein, and said flanges may be notched at intervals therealong as shown at 6 in Figure 5.

Since the object of my invention is to provide a domed or arched walk so that the said median line is higher than the balance thereof as a means of shedding water, and since, also, it is the design to provide a walk, that is level for the travel thereover of trainmen in the performance of their duties, and at the same time present a frictional grip for the trainmen's shoes, the upper or arched side of the walk sections are provided with upstanding friction portions. These are preferably integral with the body 1 and may be created by forcing the metal outwardly upon the arched surface by means of dies, for example, creating tubular extensions 5 to such an extent and in such manner that their free extremities or points all stand at about the same height, meeting a plane shown by the dotted line X—X in both Figures 4 and 5 spaced from the arched side of the section for the

purpose of providing a horizontal support, the shortest extensions naturally being at the highest part of the arch. These extensions are closely arranged so that a comparatively large number of them will be covered by a shoe sole of average area.

Due to the fact that during weather of low temperatures the sloping body 1 will drain off any water falling thereon it is clear that the portions 5 will form friction points as a grip for the footwear. And even though snow and ice might build up around these portions the shoesole will still be forced upon the friction points affording safety to the trainmen by preventing slipping.

The level walk provided by the said portions 5 is akin to the ordinary board walk now in use but with the advantage that a friction grip is always present. Advantages, also, are that such a car-walk is of long life especially when properly protected by paint or the like, and there is no chance of the trainmen tripping as in the case of the wooden type of walk when broken or splintered.

Since of arch form the sections of the walk are rugged and cannot give way under weight imposed in passing over them even when made of fairly light gauge of metal. While the portion 5 might be separate from the body 1 and attached thereto, for obvious reasons they are preferably integral parts of the whole, and in being tubular each presents a considerable friction edge.

The walk herein described is the result of an increasing demand by both trainmen's and railway organizations for a walk to replace the already mentioned wooden walk always a source of danger.

Since the openings of the portions 5 are conical snow and ice will readily drop out of them when the temperatures even but slightly rise above freezing.

Although the said portions are shown tubular they may be of other forms but in any event they should terminate in such manner as to provide the proper frictional grip for the foot-wear.

I claim:

1. In a car walk a metal plate for mounting upon the top of a car, the same including a part inclined at an angle to the horizontal and having a series of relatively sharp portions upstanding from the upper side of the same, all terminating at their free ends in substantially a horizontal plane.

2. In a car walk section, a metal plate for mounting upon the top of a car including a part inclined at an angle to the horizontal, the same having a series of relatively sharp tubular portions upstanding from its upper side all terminating substantially in a horizontal plane and opening through said part.

3. A walk section for the top of a railway car arched in one direction and having portions upstanding from its arched side, all said portions terminating substantially in a plane spaced from such arched side.

4. A walk section for the top of a railway car to extend longitudinally thereof and arched transversely and having portions upstanding from its upper arched side, all said portions terminating at their free ends substantially in one plane spaced from such arched side.

5. A walk section mounted on the top of a railway car extending longitudinally thereof and arched transversely and having spaced upstanding friction portions on its upper arched side, the free extremities of the portions terminating in substantially a horizontal plane spaced above said arched side.

6. A walk section for the top of a railway car arched in one direction and having spaced tubular portions upstanding from the arched side thereof, all of said portions terminating at their free extremities in substantially a plane spaced from said arched side.

7. A walk section for the top of a railway car comprising a long and narrow metal member arched transversely, and having spaced upstanding portions on its arched side integral therewith, all terminating at their ends in a plane spaced from the arched side thereof.

8. A walk section for the top of a railway car comprising a long narrow sheet metal member arched transversely and including spaced integral tubular portions upstanding from its outwardly arched side, the free extremities of the portions terminating in substantially a horizontal plane lying adjacent to but spaced from said arched side.

9. A walk section for the top of a railway car comprising a sheet metal member arched in one direction thereacross and having a flange turned upon each edge at the ends of the arch and away from the outwardly arched side, and also having a series of spaced integral tubular portions struck up from its arched side all terminating at their ends in a plane lying outward from the outwardly curved side of said members.

10. An article of manufacture consisting of a length of metal arched transversely and having a series of extensions projecting from its outwardly arched side all of the extremities of which substantially meet a plane spaced from said outwardly arched side, and which plane is equidistant from the outer lowest edges of the said arch.

11. An article of manufacture consisting of a length of metal arched transversely and having a series of extensions projecting from the outwardly arched side, all of the free extremities of which are substantially sharp and substantially meet a plane spaced from said outwardly arched side, which plane is equidistant from the lowest edges of said arch.

12. An article of manufacture consisting of a length of metal arched transversely and having a series of extensions integral therewith projecting from its outwardly arched side all of the free extremities of which substantially meet a plane spaced from said outwardly arched side, which plane is the same distance from both of the lowermost edges of said arch.

13. An article of manufacture consisting of a length of metal arched transversely and having a series of sharp tubular extensions integral therewith projecting from its outwardly arched side all of the free extermities of which substantially meet a plane spaced from said outwardly arched side, which plane is the same distance from both the lowermost edges of the said arch.

In testimony whereof I affix my signature.

JULIUS Q. GILL.