Jan. 7, 1930. R. G. WILLIAMS 1,742,838

STATE HIGHWAY GUARD FENCE

Filed March 27, 1929

FIG. 1.

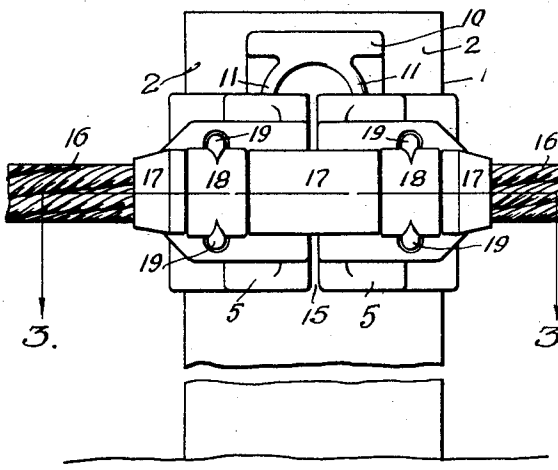


FIG. 4.

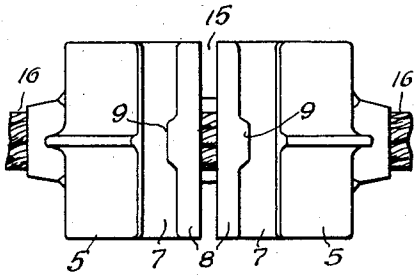


FIG. 5.

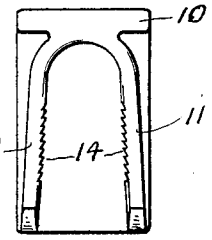


FIG. 6.

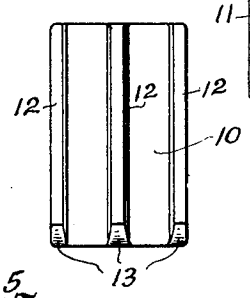


FIG. 2.

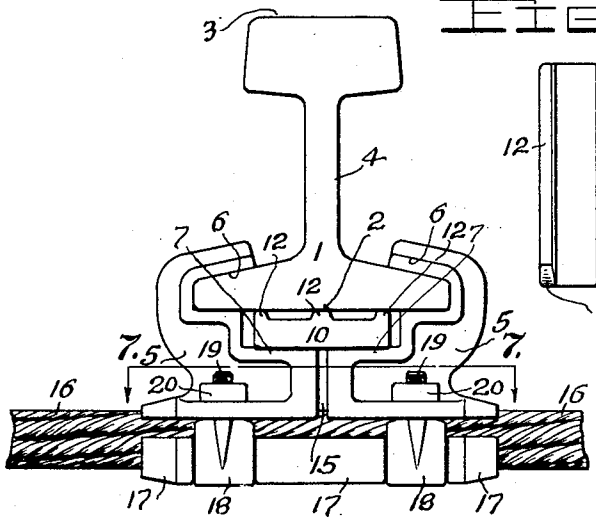


FIG. 7.

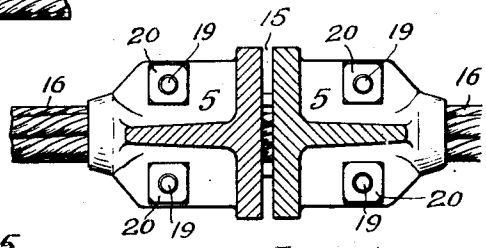
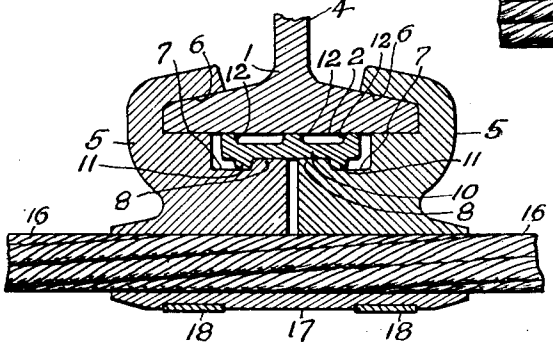


FIG. 3.



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UNITED STATES PATENT OFFICE

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STATE-HIGHWAY GUARD FENCE

Application filed March 27, 1929. Serial No. 350,391.

This invention has reference to guard fences for state highways, but particularly refers to a fixture through which a fence cable passes and is suitably clamped therein, and furthermore refers to the manner in which said fixture is secured to the fence post.

The object of the invention is to secure the fixtures immovably to the fence posts, and to so clamp the cables, which are used instead of rigid fence rails, that they will slip through the clamps when a heavy object has plunged against said cables.

Other objects will be apparent from a reading of the subjoined description and the accompanying drawings which latter show an approved form of the invention.

In these drawings

Figure 1 is an elevation showing the invention applied to a single post and cable, and viewed from the roadway.

Figure 2, is a plan view of the construction shown at Figure 1.

Figure 3 is a section at line 3—3 of Figure 1.

Figure 4 is an inside view of the fixture as it appears free from the post and with the clamping wedge removed.

Figures 5 and 6 are detail elevations showing opposite faces of the clamping wedge, and

Figure 7 is a section at line 7—7 of Figure 2.

In the following description similar numerals of reference will be used to designate like parts in the several figures of the drawing.

In the first place attention is called to the fact that wire cables are used in the construction of the fence proper, so that the latter may yield when struck by a heavy body, as an automobile, this yielding causing the cables to slip more or less through their clamps and to thus appreciably relieve the posts of undue strain.

It will be understood that the posts will carry two, three or more of these cables properly spaced and held by separate clamping fixtures that are fixed to said posts, this being the usual manner in which guard fences are constructed, but as this is a mere duplication, the drawings show and the description will be limited to a unit of the fence comprising a single post, fixture and cable.

1 is the post which is made of iron or steel and is shaped like a railroad rail in cross section with a comparatively wide flange or face 2, a comparatively narrow face 3 and a connecting web 4.

This post is anchored in the ground in any suitable manner with the part 2 facing the roadway.

The clamp fixture is composed of two like members 5 that have recessed portions 6 shaped to conform to the side flanges of the face 2, and the fixture is applied to these flanges so as to house the latter as shown at Figures 2 and 3.

These members 5 have floors 7 whose inner edges are spaced apart and have raised portions 8, and extending laterally from the middle of these portions are short nubs 9.

10 generally denotes a clamping wedge having along one face ribs 11 that are inclined from the outer ends so as to gradually approach each other, while several parallel ribs 12 extend from the opposite face of this wedge.

After the members 5 have been positioned on the flanges of the face 2, the wedge 10 is driven between the main body of this face and the floors 7 with the ribs 11 straddling the portions 8, and said ribs will engage the nubs 9 and thereby draw the members 5 toward each other so as to cause the inner walls of the recesses 6 to bind firmly against the ends of the part 2.

The inner ends of the ribs 12 are chamfered as shown at 13, and, as the wedge is driven in the manner above described, these ends 13 will act like cams and will cause the members 5 to bind with great force against the post. It is preferred to serrate the ribs 11 as shown at 14 in order to effectively prevent slipping backward.

The operation just described will be readily understood by referring to Figure 3 of the drawings, and it will be clear that this wedge will function to bind the members 5 to the post in all directions. It will, of course, be clear that when the members 5 are positioned

on the post they will be spaced apart, substantially as shown at Figure 4, this space being denoted by the numeral 15, and that such space will be somewhat decreased, after the wedge has been driven, as shown at Figures 1, 2, 3, and 7.

The bases of the members 5 are conformed to the cable 16, and an outer or complementary clamping bar 17 conformed to the cable has straps 18 passed therearound with bolts 19 integral with these straps and extending through said bases, and nuts 20 are driven on these bolts whereby the cable is clamped to the fixture.

This clamping of the cable, while sufficient to hold the cable firmly under ordinary pressure or shocks, will permit the cable to slip through the clamp when the cable is struck violently and with great force, as by an automobile, and thus relieve the adjacent posts from undue strain.

Since this clamping of the cable is modified, the clamping bar 17 is not absolutely necessary, since the straps 18 will hold the cable sufficiently firm. In fact, this invention is not to be identified with any specific means for clamping to the cable, and it is therefore merely necessary that clamping means of some sort be utilized for this purpose.

What is claimed is:—

1. In a guard fence for highways, a metal post having flanged parts, separate clamping members having recesses that embrace said parts and having floors whose inner edges are spaced and formed with raised portions with short nubs extending laterally from the middle of said portions, a wedge member having on one face inclined ribs, and on the other face straight chamfered ribs, said inclined ribs adapted to engage said nubs and said straight ribs adapted to engage said post when the wedge is driven in position, a cable, and means for clamping the bases of said members to said cable.

2. In a guard fence for highways, a post having a flat portion facing the highway and terminating in lateral flanges, separate clamping members having recesses that embrace said flanges with said members in spaced relation, cooperating wedge appliances for binding said members to the post in all directions, a cable, and means for clamping the bases of said members to said cable.

In testimony whereof I affix my signature hereto.

ROLLAND G. WILLIAMS.