

Feb. 19, 1929.

1,702,574

J. A. ROBERTS

HIGHWAY GUARD

Filed Feb. 27, 1928

2 Sheets-Sheet 1

Fig. 1.

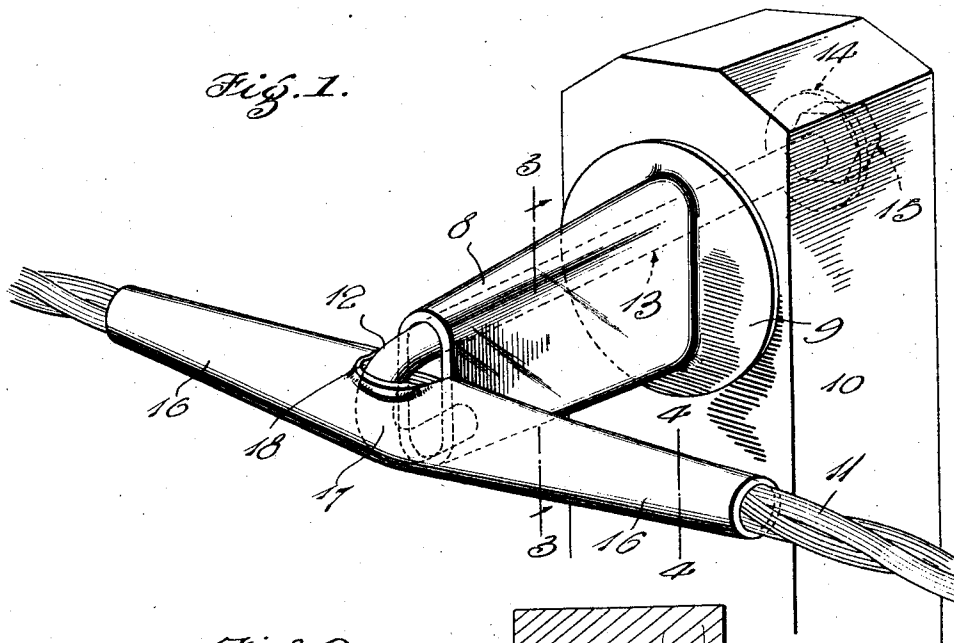


Fig. 2.

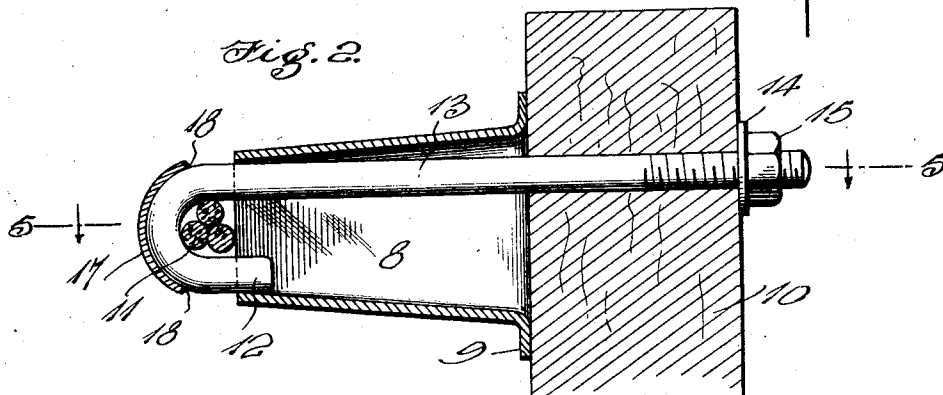


Fig. 3.

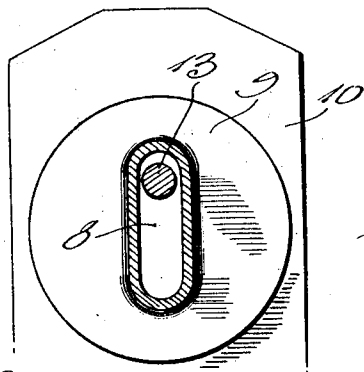
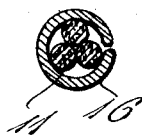


Fig. 4.



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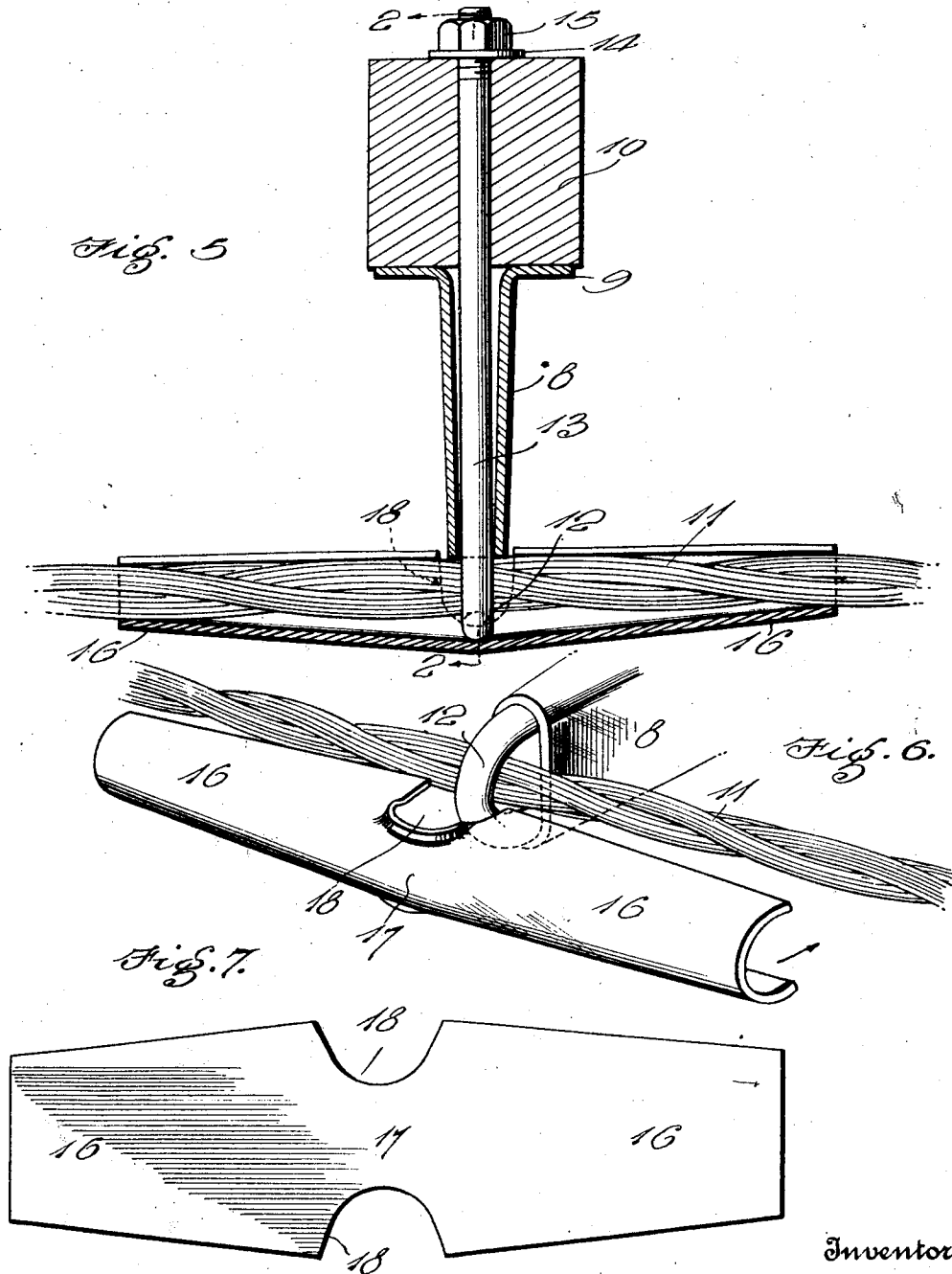
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UNITED STATES PATENT OFFICE.

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HIGHWAY GUARD.

Application filed February 27, 1928. Serial No. 257,379.

The invention relates to improvements in guards placed along highways at embankments or the like, to prevent vehicles from running off of the road in case of accidents.

5 The invention has reference more particularly to guards of this type which make use of a plurality of posts and steel cables secured to said posts and having their ends anchored to suitable "dead men."

10 One object of the invention is to provide new and improved means for securing the cables to the posts and for holding said cables in inwardly spaced relation with said posts, so that parts of a machine cannot readily
15 strike the posts but will slide along the cables.

A further object is to provide novel guard means for the securing means of the cables, preventing any vehicle parts from catching
20 upon said securing means if coming into contact therewith.

A still further object is to provide a construction which is simple and inexpensive, may be easily manufactured and sold at small
25 cost, and may be installed with ease, regardless of the configuration of the posts.

With the foregoing in view, the invention resides in the novel subject matter herein-
after described and claimed, description being accomplished by reference to the accom-
panying drawings.

Fig. 1 is a perspective view.

Fig. 2 is a vertical sectional view, the plane on which this view is cut, being indicated by line 2—2 of Fig. 5.

35 Figs. 3 and 4 are detail sectional views on the correspondingly numbered lines of Fig. 1.

Fig. 5 is a horizontal sectional view on line 5—5 of Fig. 2.

40 Fig. 6 is a perspective view showing the manner in which the guard for the cable-securing means is applied.

Fig. 7 is a plan view of the blank from which the aforesaid guard is formed.

45 The drawings above briefly described illustrate the preferred details of construction, and while these details will be herein specifically explained, it is to be understood that within the scope of the invention as claimed, variations may be made.

50 The numeral 8 denotes a partly flattened metal tube of continuous cross section throughout its length and tapered toward one end, the larger end of this sleeve being provided with a continuous outstanding
55 flange 9 to bear against a post 10. The en-

tire sleeve may be malleable if desired, but I prefer to at least make the flange 9 of such nature, permitting it to be hammered into proper shape at the time of application, to
60 fit the contour of the post, whether a convex, a concave or a flat formation be required of said flange. The smaller or outer end of the sleeve 8 is adapted to abut a steel cable 11, which cable is secured against said sleeve end
65 by the hook 12 on the end of a J-bolt 13, a portion of this hook being receivable in said smaller end of the sleeve. The bolt 13 passes longitudinally through the sleeve 8 and is of greater length than the latter to extend
70 through the post 10, the outer end of said bolt being provided with a washer 14 and nut 15. Tightening of this nut not only secures the sleeve 8 tightly against the post 10, but causes
75 the hook 12 to tightly clamp the cable 11 against the outer end of said sleeve.

A guard of novel form is provided to prevent fender, wheel or body portions of a vehicle from catching upon the hook 12, should such vehicle come in contact with the high-
80 way guard. In the present showing, two metal sleeves 16 surround the portions of the cable 11 at opposite sides of the hook 12 and the bracket or the like 8, and the inner ends of these sleeves 16 are integral with a guard
85 plate 17 which extends across and partially covers the hook 12. The sleeves 16 and the guard portion 17 have their exposed surfaces so merging into each other that no abrupt projections are provided, upon which
90 parts of vehicles may catch if sliding along the highway guard. The sleeves 16 are both preferably split throughout their lengths, permitting these sleeves and the guard portion 17 to be manufactured in the form of a
95 channel as shown in Fig. 6, with notches 18 at its upper and lower sides. This channel may be readily applied by hand as will be clear from Fig. 6, the notches 18 receiving the upper and lower portions of the hook
100 12 and portions of the bracket or the like 8. After positioning the guard member in place, the sleeves 16 may be easily clinched about the cable 11, thereby tenaciously securing said guard member and cable in assembled
105 relation.

The portions 8—9 and 16—17 may be formed in any desired manner, for instance, of stampings, forgings, or castings, appropriate annealing being, of course, carried out
110 if necessary, to permit clinching of the sleeves 16 around the cable 11 and to permit

bending of the flange 9 into conformity with the configuration of the post with which it is to contact. In the present showing, it may be considered that the sleeves 16 and the guard portions 17 are all stamped from a single blank of the configuration shown in Fig. 7.

The invention is not only greatly desirable for securing the cables of highway guards in spaced relation with the posts to prevent machine parts from striking the latter, but it is of such nature that a machine, for instance, colliding with the guard and sliding along the same, cannot catch upon any parts thereof. If the body of the machine, for instance, is sliding along the cables, no part thereof can catch upon the hook 12, but will be guided across said hook by the sleeves 16 and guard portion 17.

On account of the excellent results obtainable from the details disclosed, they are preferably followed. However, variations may be made within the scope of the invention as claimed.

I claim:

1. In a highway guard, sleeves to surround a cable at opposite sides of securing means of said cable, and a guard for the cable securing means extending between and connected with the inner ends of said sleeves.

2. A structure as specified in claim 1, said sleeves being longitudinally split, permitting them to be clinched around the cable.

3. In a cable securing means for a highway guard, a partially flattened sleeve of continuous cross section throughout its length, one end of said sleeve being provided with a continuous outstanding malleable flange to bear against a post, and a J-bolt extending longitudinally through said sleeve with its hooked end receivable partly in said sleeve to hold a cable against the latter, said bolt being longer than the sleeve, for passage through the post.

In testimony whereof I have hereunto affixed my signature.

JAMES ADDISON ROBERTS.