Aug. 14, 1928. 1,680,548

P. L. KEISER

HIGHWAY GUARD

Filed Dec. 13, 1927

Fig. 1.

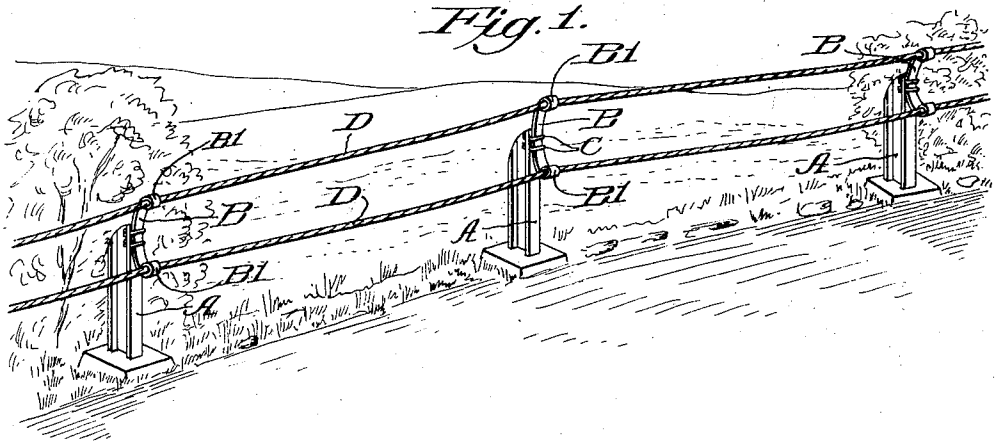


Fig. 2.

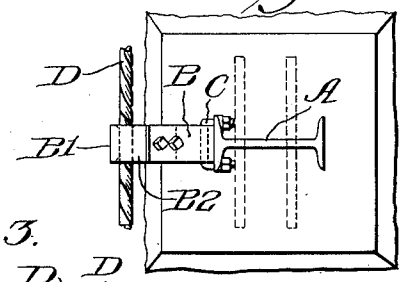


Fig. 5.

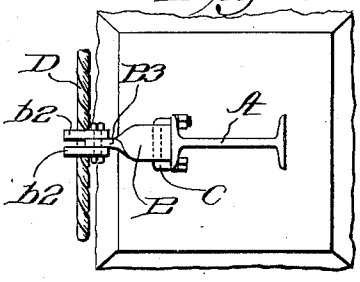


Fig. 3.

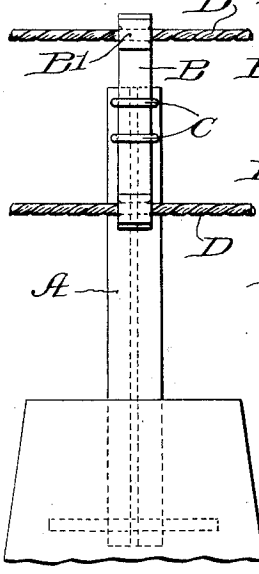


Fig. 4.

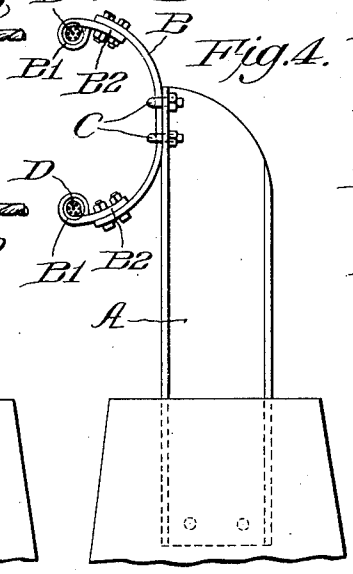
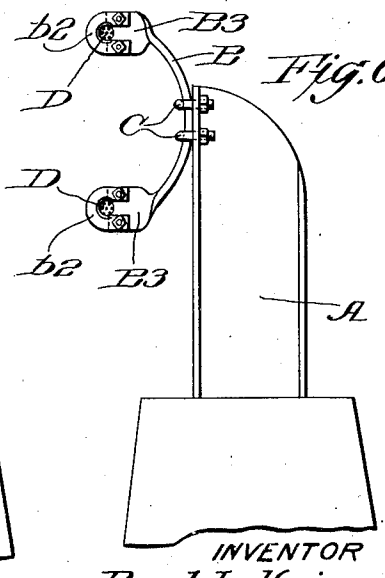


Fig. 6.



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UNITED STATES PATENT OFFICE.

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HIGHWAY GUARD.

Application filed December 13, 1927. Serial No. 239,805.

My invention relates to the construction of a guard rail for highways and has for its object to provide a structure of this kind which is at once very simple, very strong, very efficient and of comparatively low cost. The nature of my invention will be best understood as described in connection with the drawings in which it is illustrated and in which

Figure 1 is a perspective view of a highway guard embodying my improvements.

Figure 2 is a plan view of one of the posts of the guard with the parts immediately attached to it, showing a preferred feature of construction not shown in the smaller scale drawing of Figure 1.

Figure 3 is a face view of the structure shown in Fig. 2.

Figure 4 is a side elevation of the structure shown in Fig. 2.

Figure 5 is a view similar to Fig. 2, but showing still another preferred detail of construction, and

Figure 6 is a side elevation of the structure shown in Fig. 5.

A, A, A, are the supporting posts of the highway guard which may conveniently be, as illustrated, made of eye beams firmly anchored in concrete foundations. B, B, etc., indicate bow springs, preferably of U shape, secured firmly to the tops of the posts and having free ends extending out from the posts in the direction of the highway. Where my preferred form of a U shaped spring is used, the springs are secured centrally to the post, as shown, with the free ends extending outwardly toward the highway. B^1, B^1, etc., indicate eyes formed on the ends of the springs for the support of the cables indicated at D. C, C, indicate clips for holding the springs to the posts. As shown in Figs. 2, 3, and 4, the eyes for supporting the cables are formed separately from the springs and detachably secured to the spring ends by bolts; these detachable ends are indicated at B^2. As shown in Figs. 5 and 6, the ends of the springs indicated at B^3 are bent at a right angle to the body of the springs and in this modification I have also indicated the detachable clips shown at b^2 for holding the cable on the ends of the springs.

It will be seen that by my construction the cables are held well away from the posts in the direction of the highway so as to protect the posts from contacting with vehicles coming in contact with the cables. The bow springs are not only efficient means for supporting the cables at a proper distance from the posts but are admirably adapted to give the desired resilience to the guard. To take up blows of colliding vehicles it is preferable to provide, as I have shown, two cables supported at different heights from the ground and the U shaped bow springs which support these cables are again admirably adapted to take up shocks.

I prefer to support the cables directly on detachable devices which can easily be replaced in case of injury.

My preferred modification shown in Figs. 5 and 6 is one which avails itself not only of the elasticity of the bow spring against shocks in the direction of the supporting posts but also, by means of the twisted ends indicated at B^3, provides elasticity in the direction in which the cables extend so that a vehicle coming in contact with these twisted ends will meet with resilient resistance.

Having now described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. A highway guard comprising a row of spaced posts, bow springs secured to the posts with their free ends extending outward from the posts towards the highway and a cable supported on the free ends of the bow springs.

2. A highway guard comprising a row of spaced posts, U shaped bow springs centrally secured to the posts with their free ends extending outward towards the highway and two cables one supported on the upper and the other on the lower free spring ends.

3. A highway guard having the features of claim 1, in which the cable is supported on the spring ends by means of a detachable supporting device.

4. A highway guard having the features of claim 1, in which the ends of the springs are bent to a right angle with respect to the body of the spring.

PAUL L. KEISER.