Oct. 20, 1931. R. G. WILLIAMS 1,828,349

AUTOMATIC COMPENSATING DEVICE FOR HIGHWAY GUARD FENCE CABLES

Filed Dec. 26, 1930

Fig. 1.

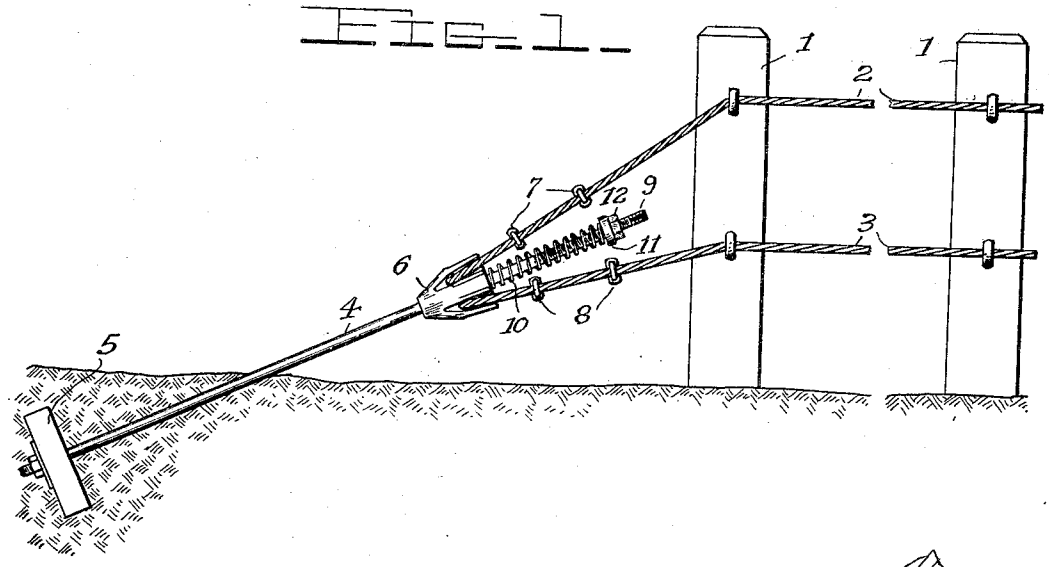
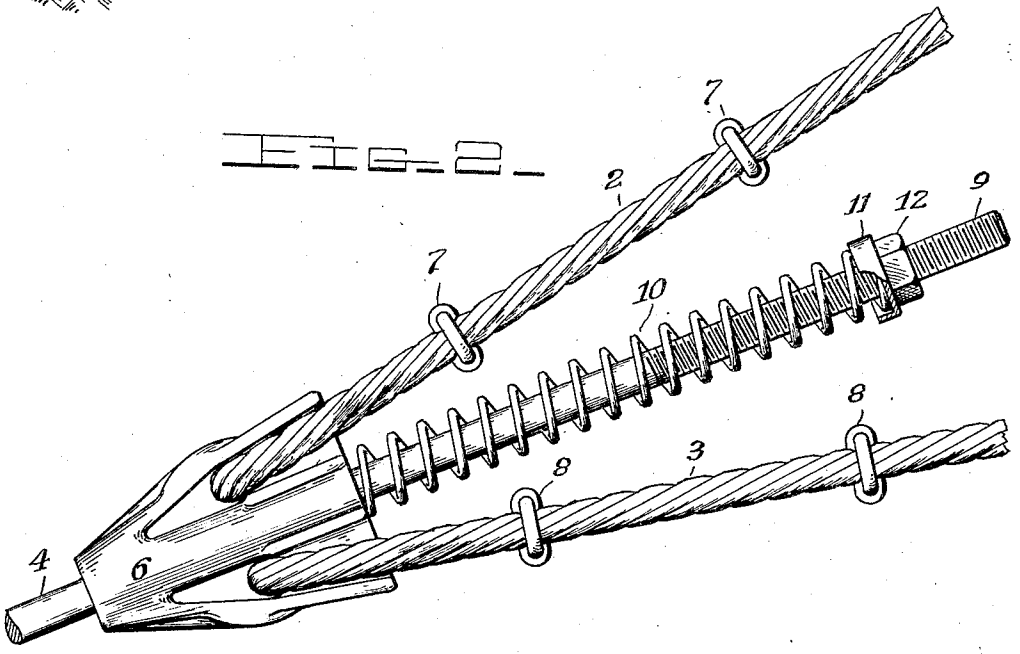


Fig. 2.



Inventor
Rolland G. Williams
By
J. W. Francis
Attorney

Patented Oct. 20, 1931 1,828,349

UNITED STATES PATENT OFFICE

ROLLAND G. WILLIAMS, OF BRANFORD, CONNECTICUT, ASSIGNOR TO MALLEABLE IRON FITTINGS COMPANY, OF BRANFORD, CONNECTICUT, A CORPORATION OF CONNECTICUT

AUTOMATIC COMPENSATING DEVICE FOR HIGHWAY GUARD FENCE CABLES

Application filed December 26, 1930. Serial No. 504,907.

This invention relates to an automatic compensating device for highway guard fence cables, and has for its object to provide means which will automatically take care of the contraction and expansion of fence cables due to changes of temperature.

In the accompanying drawings

Figure 1 is an elevation showing a portion of a highway guard fence equipped with my improvement, and

Figure 2 is a detail broken view, on an enlarged scale, of the compensating device.

Similar numerals of reference denote like parts in both figures of the drawings.

1 designates the posts, and 2, 3, the cables which are supported by the posts in any suitable manner.

In highway guard fences, at every two hundred or three hundred feet or thereabouts, it has been customary to secure the cables to a suitable anchorage, the anchorage contacts at the ends of the several sections crossing each other, so that there is no real gap in the continuity of the guard fence, this being a well known practice and requiring no explanation herein.

But the trouble has been that when the cables have contracted, in extreme cold weather, the posts will either be displaced or the anchorages have been disturbed to such a degree that when the cables expanded at a warmer temperature they became so slack as to be useless, and the object of the present invention is to remedy this defect in a very simple manner.

4 is a rod secured to an anchor 5 which latter is usually buried in the ground as shown, the rod extending upwardly therefrom and having assembled around it a thimble 6 which is perfectly free to move lengthwise of the rod.

To this thimble 6 are secured the ends of the cables 2, 3, these ends being passed through suitable openings in the thimble and then secured to the main bodies of the cables by means of ordinary clamps 7, 8.

The outer extremity of the rod 4 is threaded, as seen at 9, and a heavy coil spring 10 surrounds the rod and is confined between the thimble and the cup 11 loose around the rod, and against this cup a nut 12 is positioned on the threaded rod so as to regulate the tension of the spring 10.

When the cables contract the thimble will be pulled against the spring 10 and thereby provide a yielding element which will prevent any damage by this contraction.

When the cables tend to become slack in hot weather the spring will act against the thimble and force the latter downwardly along the rod and thus take up the objectionable slack.

It will thus be seen that the structure just described automatically takes care of contraction and expansion of the cables.

What is claimed is:—

1. An anchoring device for fence cables comprising an anchored rod, a thimble loosely assembled around said rod the latter being threaded at its outer end, means for attaching the fence cables to said thimble, a cup loosely surrounding the rod, a coil spring surrounding the rod and confined between said cup and thimble, and a nut threaded on said rod against said cup whereby the tension of the spring is regulated.

2. An expansion and contraction compensating anchorage device for highway guard fence cables consisting of an anchorage rod, a coil spring around said rod and a thimble through which said rod loosely extends and to which the cables are secured, said spring being confined between said thimble and a tension nut threaded on said rod, whereby slack in the cables is taken up by the action of the spring against said thimble, while the contraction of the cables will pull the thimble against the spring and compress the latter.

In testimony whereof I affix my signature hereto.

ROLLAND G. WILLIAMS.