Jan. 27. 1925. 1,524,121

J. DRZEWIENSKI

SPRING COMPENSATOR

Filed May 15, 1922

FIG. 1

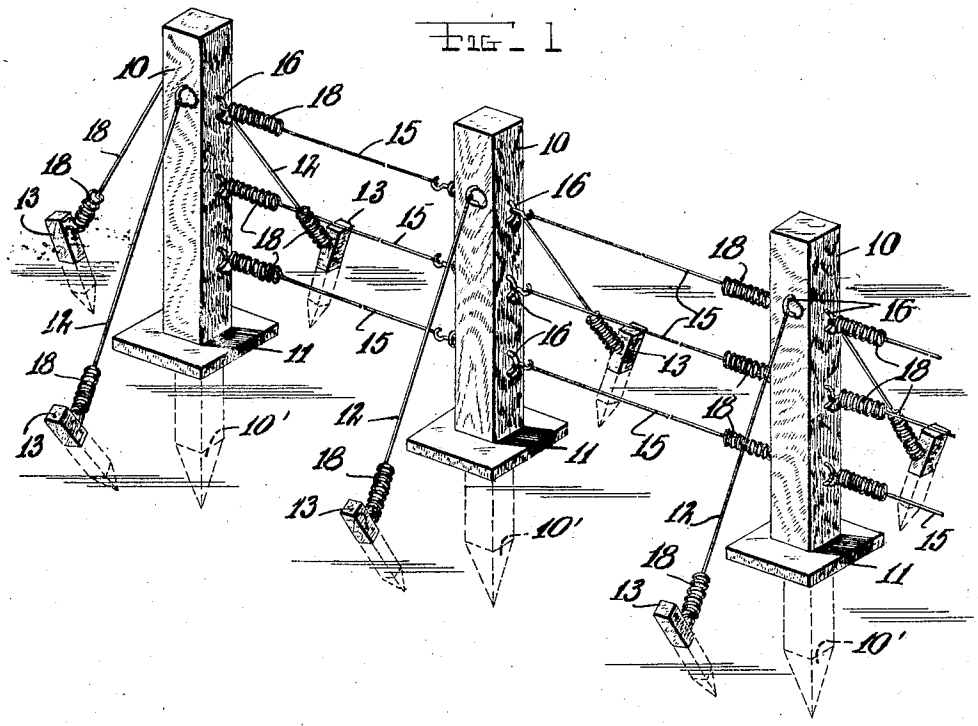
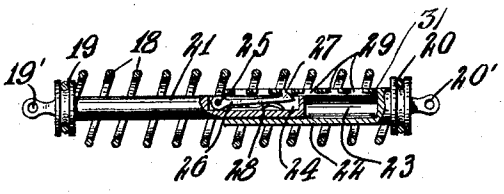


FIG. 2



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UNITED STATES PATENT OFFICE.

JOSEPH DRZEWIENSKI, OF JENNERS, PENNSYLVANIA.

SPRING COMPENSATOR.

Application filed May 15, 1922. Serial No. 560,921.

To all whom it may concern:

Be it known that I, JOSEPH DRZEWIENSKI, a citizen of Poland, residing at Jenners, in the county of Somerset and State of Pennsylvania, have invented certain new and useful Improvements in Spring Compensators, of which the following is a specification.

This invention relates generally to a spring compensator adapted to be applied to springs used in connection with the stringers of wire fences to prevent sagging thereof; the invention having for an object to provide a novel and improved form of device which prevents expansion of the spring once the latter has contracted to take up any slack that may develop.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

Fig. 1 of the drawings is a detail perspective view showing my improved device applied to a section or length of my improved fence.

Fig. 2 is a longitudinal vertical sectional view, partly in elevation, of the novel slack taking up device.

Referring now to the drawing I have shown in Fig. 1 a fence section comprising the posts 10 which may be of square or round cross section as desired, and constructed of wood or other suitable material. The lower ends of these posts are pointed as at 10′ to facilitate insertion into the ground, and the posts have fixed thereto, at a suitable distance above their pointed lower ends, the plates or flanges 11 which are adapted to rest upon the ground. The posts are preferably braced by inclined guy wires 12 connected at one end to the posts near the upper ends of the latter and at their lower ends to stakes 13 sunk in the ground. There are a pair of these guy wires arranged one at each side of each fence post, while the end posts of any length or section may have longitudinally projected guy wires as indicated at one end of Fig. 1.

The fence stringers, or horizontal members to which my improved device is applied, are in the form of wires 15 connected at opposite ends to the posts 10 and extending therebetween, being here shown as engaging with eyes 16 fixed to the posts, any suitable number of stringers being employed, and spaced vertically according to requirements.

To ensure against sagging either of the stringer wires 15 or the guy wires 12 I place therein the coiled tension springs 18 which as will be apparent, serve to take up slack. These coiled tension springs have applied thereto novel means which permit of contraction but prevent expansion, one of these devices being illustrated in Fig. 2. As here shown the spring 18 is attached at opposite ends to circumferentially grooved heads 19 and 20 respectively, formed on opposite ends of solid and hollow rods 21 and 22 telescoping one into the other, the end of rod 21 engaging freely in the boring 23 of rod 22.

The end of rod 21 which engages in the boring 23 is formed with a longitudinal groove or recess 24 in which is pivoted at one end as at 25 a detent arm 26 having a hook 27 on its opposite end presenting a beveled forward edge. This hook 27 is pressed toward the wall of boring 23 by a flat spring 28 located in the groove 24. Formed in the wall of the rod 22 are longitudinally spaced openings 29 into which the hook 27 may be projected by the spring 28. Formed on the inner face of the wall of rod 22 is a longitudinal groove 31 which registers with the openings 27. The heads 19 and 20 have integral eyes 19′ and 20′ respectively, thereon to which the wire ends may be attached.

As will be apparent, when slack develops in the wire, the spring 18 contracts, causing the rod 21 to project further into the boring 23, the bevel face of the hook 27 acting as a cam to force the latter out of such one of the openings 27 with which it may have been engaged, the hook engaging in the next opening when sufficient slack develops. The engagement of the hook 27 in the groove 31 acts to prevent relative turning movement of the two rods 21 and 22.

Having thus described my invention what I claim as new and desire to protect by Letters Patent of the United States is as follows:

1. In a device of the class described, a pair of rods one of which is hollow and telescopically receives the other, said rods being adapted for connection to different parts, a tension spring connected at opposite ends

to the respective rods, a detent arm pivoted in the inner rod and adapted to engage in any one of a series of apertures in the hollow rod to prevent expanding movement of the spring while permitting contraction thereof, a guide element in said hollow rod engaged by said detent arm to prevent relative rotary movement of the two rods, and a spring engaged with said arm and retaining the latter engaged with said guide element.

2. In a device of the class described, a pair of rods one of which is hollow and telescopically receives the other, said rods having enlarged heads at their remote ends and being adapted for connection to different parts, a coiled tension spring connected at opposite ends to the respective heads and surrounding the said rods, and a detent arm pivoted in the inner rod and adapted to engage in any one of a series of apertures in the outer rod to prevent expanding movement of the spring while permitting contraction thereof.

3. In a device of the class described, a pair of rods one of which is hollow and telescopically receives the other, said rods being adapted for connection to different parts, a tension spring connected at opposite ends to the respective rods, and co-operating means on the respective rods adapted to prevent expanding movement of the spring while permitting contraction thereof, said means comprising a detent arm pivoted in the inner rod and adapted to engage in any one of a series of apertures in the hollow rod, said hollow rod having a longitudinal groove in its inner wall registering with said apertures, for the purpose specified.

In testimony whereof I have affixed my signature.

JOSEPH DRZEWIENSKI.