

(No Model.)

P. HERMAN.
COMPENSATOR FOR WIRE FENCES.

No. 529,649.

Patented Nov. 20, 1894.

Fig. 1.

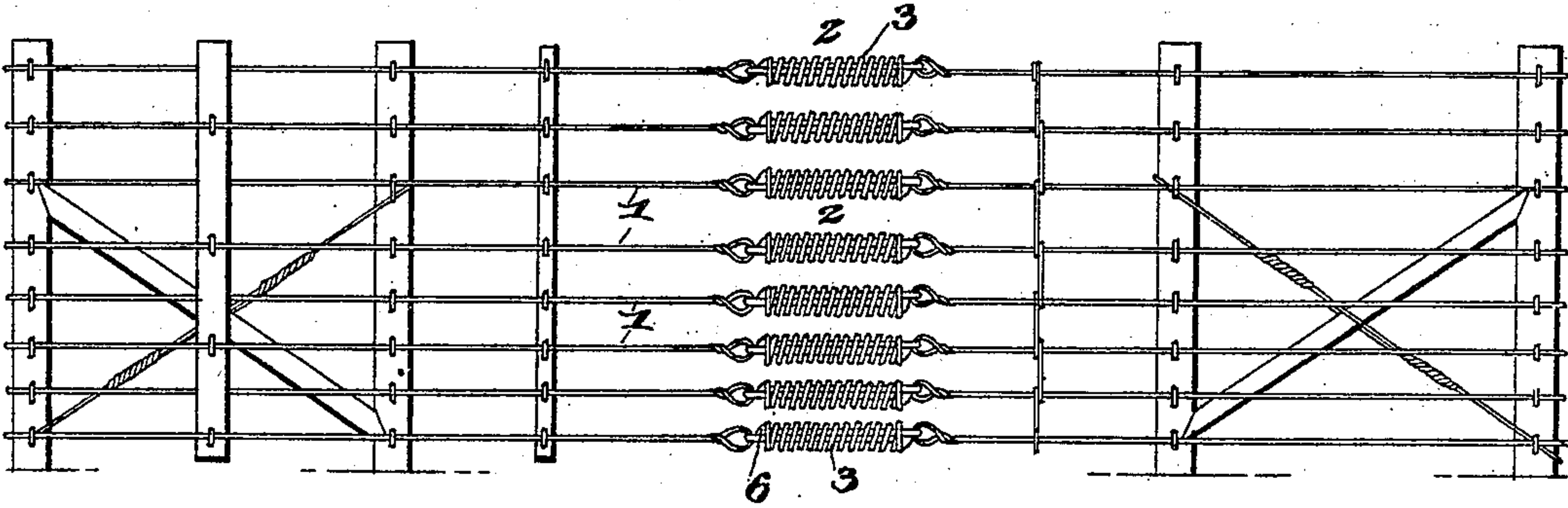


Fig. 2.

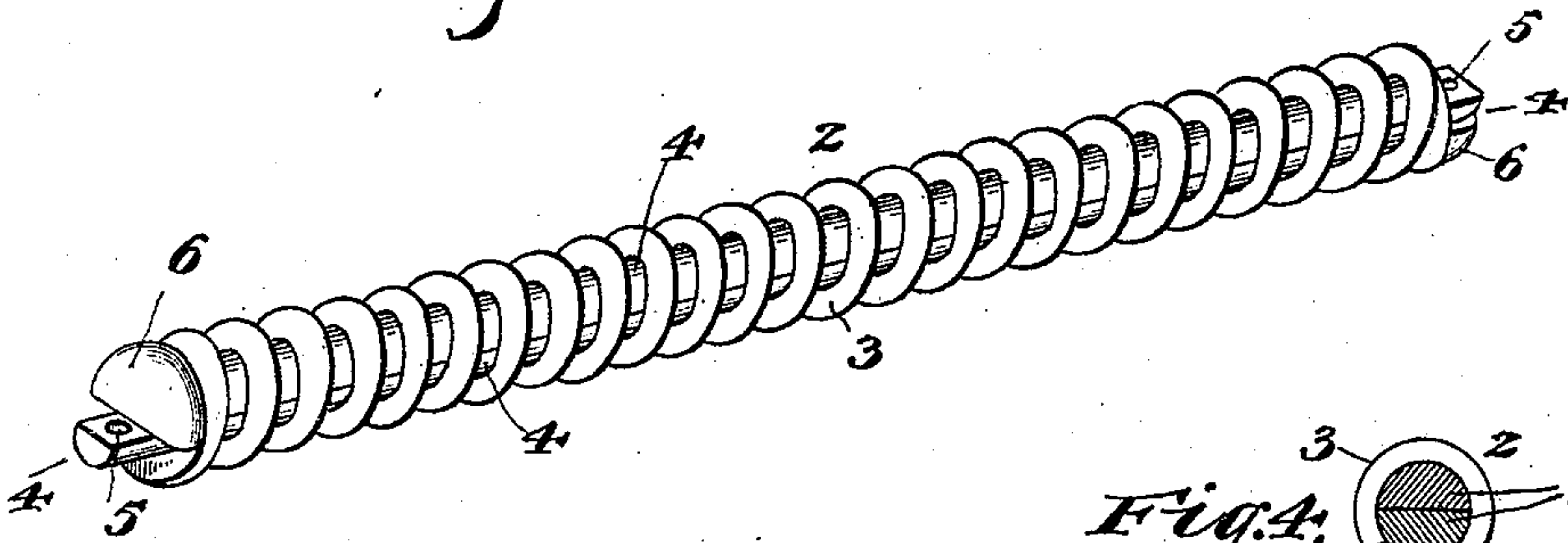


Fig. 3.

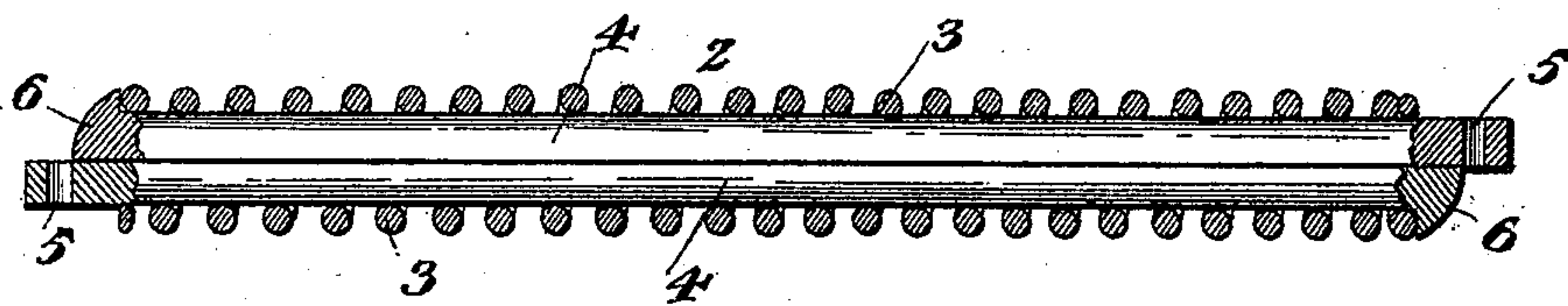


Fig. 4.

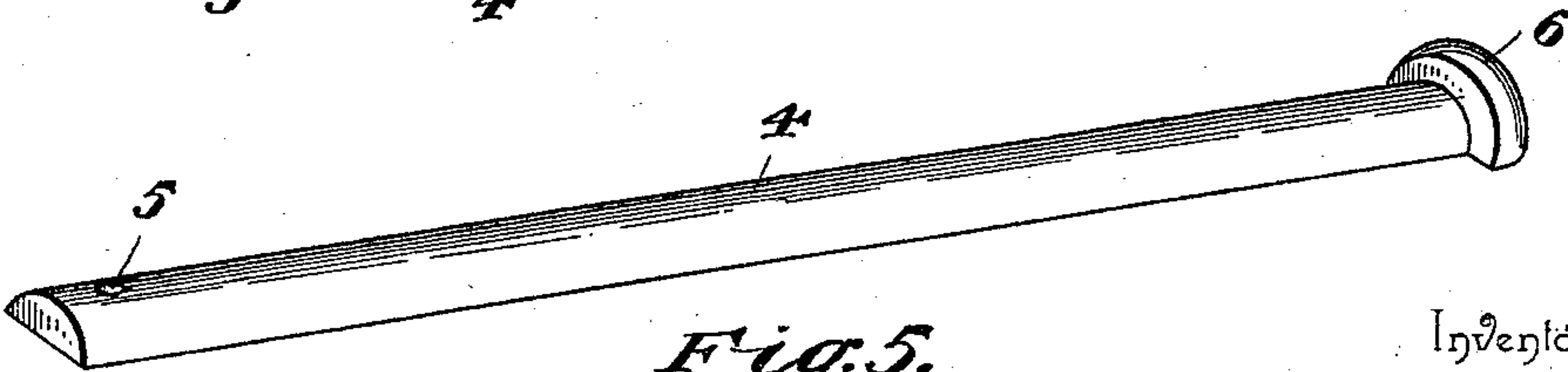


Fig. 5.

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UNITED STATES PATENT OFFICE.

PETER HERMAN, OF NORWALK, OHIO.

COMPENSATOR FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 529,649, dated November 20, 1894.

Application filed March 28, 1894. Serial No. 505,481. (No model.)

To all whom it may concern:

Be it known that I, PETER HERMAN, a citizen of the United States, residing at Norwalk, in the county of Huron and State of Ohio, have invented a new and useful Compensator for Fences, of which the following is a specification.

The invention relates to improvements in compensators for fences and the like.

The object of the present invention is to improve the construction of compensators for wire fences and the like, to prevent the fence-wires from breaking from expansion and contraction incident to changes in temperature, and to provide a simple and effective device of economic construction which, while employing cylindrical spiral springs, will fill and securely support the same.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings: Figure 1 is an elevation view of a fence constructed in accordance with this invention. Fig. 2 is an enlarged detail perspective view of the compensator detached. Fig. 3 is a longitudinal sectional view of the same. Fig. 4 is a transverse sectional view. Fig. 5 is a detail perspective view of one of the semi-cylindrical or half-round bars.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the horizontal wires of a fence, each of which wires is provided with a compensating device 2, to permit the wires to contract and expand incident to changes in temperature to prevent breakage. The compensator consists of a cylindrical spiral spring 3, and a pair of half-round bars 4, arranged within the spiral spring and extended slightly beyond the same. The half-round bars have their flat faces arranged in contact and form, when thus placed together, a cylindrical core which supports the spiral spring and prevents the same from losing its shape, and enables it to successfully withstand a greater amount of strain than it otherwise could. One end of each half-round or semi-cylindrical bar is provided with an opening or perforation 5,

and its other end has an integral segmental flange or head 6, forming a stop against which bears the adjacent end of the spring. The half-round or semi-cylindrical bars are oppositely disposed with relation to their ends. The perforated end 5 of one is arranged adjacent to the segmental or half-round head 6 of the other, whereby, when the bars are pulled outward, the spring will be compressed and will form a cushion to yield to any strain and to take up the same to prevent injury or rupture of the adjacent parts to which the compensator may be attached.

In order to prevent lateral vibration, looseness or the sagging of the center or intermediate portion of the spring, I construct the half round bars of such cross-sectional dimensions that their diameters are approximately equal to the inner circumference of the spring, thus forming a positive guide for the spring and preventing the deflection of any portion thereof when contracted. The particular advantage of this construction resides in the fact that the full strength of the coiled spring is not utilized unless the column of the coils is maintained in a line parallel with the direction of strain, and as the strain on a device of the class to which this invention belongs, is necessarily severe, the importance of this feature will be obvious. Furthermore, the construction of the tension bars of such a size as to fill the inner circumference of the coils, prevents the accumulation of dirt, twigs, grass and similar foreign material in the interior thereof, and thus preserves the device in operative condition.

It will be seen that the compensator is simple and comparatively inexpensive in construction, that a cylindrical spiral spring is employed, and that a filling core is provided for supporting and strengthening the spring.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

The combination with a divided fence wire or runner, of a compensator comprising a coiled spring, and duplicate oppositely dis-

posed half round bars arranged, with their
flat surfaces in contact, within and passing
through said spring, each bar being provided
at one end with a stop to engage the contigu-
5 ous end of the spring and at the other end
with an eye for engagement with the contigu-
ous end of the fence wire section, the com-
bined diameters of said bars being approxi-
mately equal to the inner circumference of
10 the coils in the spring to prevent looseness

and deflection of the intermediate portion of
the latter, substantially as specified.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

PETER HERMAN.

Witnesses:

L. J. DAVIDSON,
F. J. HERMAN.