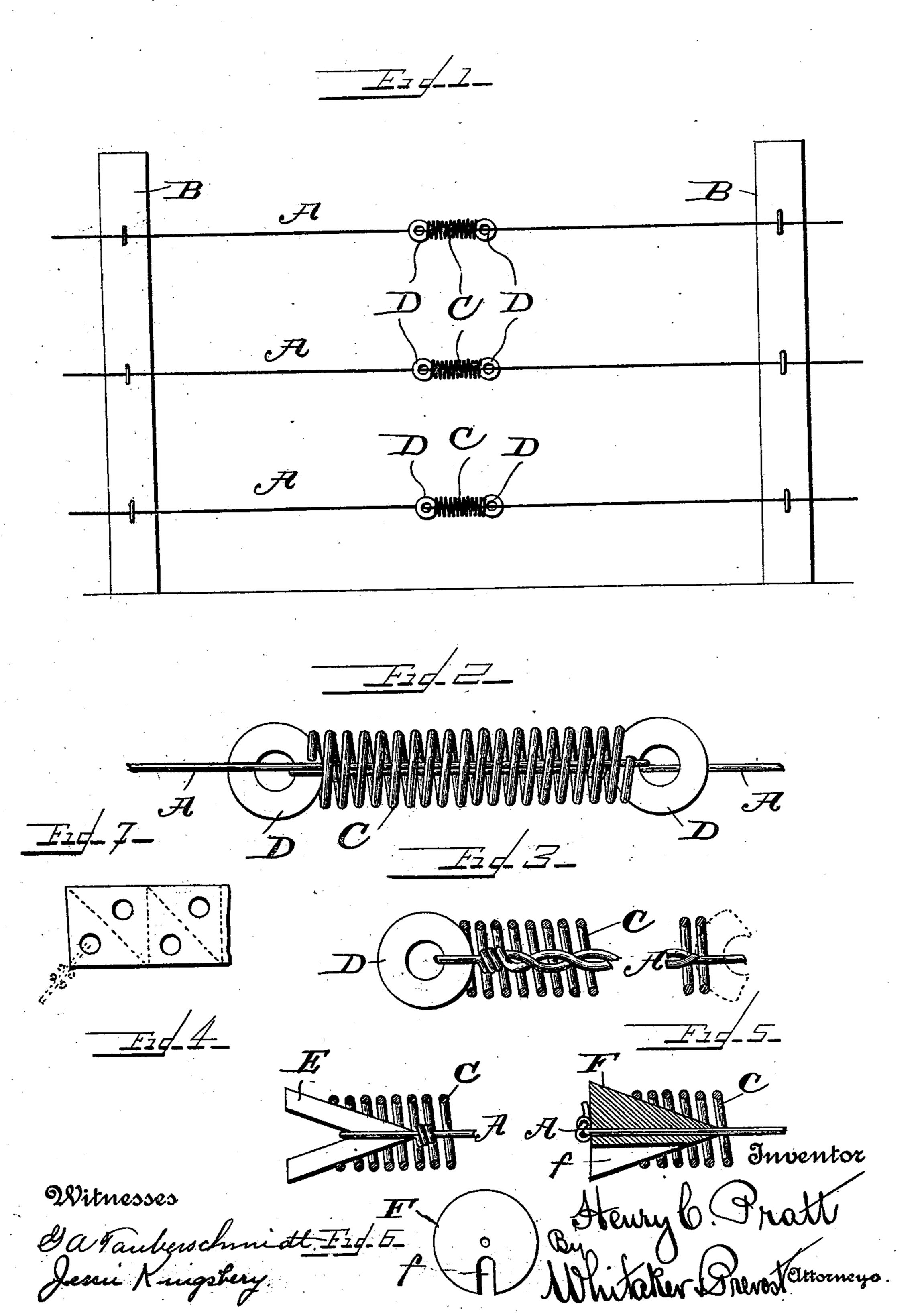
## H. C. PRATT.

## TENSION DEVICE FOR WIRE FENCES.

No. 514,130.

Patented Feb. 6, 1894.



## United States Patent Office.

HENRY C. PRATT, OF CANANDAIGUA, NEW YORK.

## TENSION DEVICE FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 514,130, dated February 6, 1894.

Application filed June 13, 1893. Serial No. 477, 505. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. PRATT, a citizen of the United States, residing at Canandaigua, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Tension Devices for Wire Fences; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement in tension devices for wire fences and consists in the novel features hereinafter described reference being had to the accompanying drawings which illustrate my invention, and the said invention is fully disclosed in the following description and claims.

Referring to the said drawings: Figure 1 shows one form of my improved tension device applied to a panel of wire fence. Fig. 2 shows the tension device enlarged. Fig. 3 is a detail sectional view of one end of the same. Fig. 4 illustrates a slight modification. Figs. 5 and 6 illustrate another slight modification of the tension device. Fig. 7 also illustrates another slightly modified form of plate to which the ends of the wires are attached.

one of the objects of my invention is to provide a tension device which can be inserted any where in a fence wire by cutting the wire and also to provide a tension device in which the devices which engage and compress the spring will center themselves so that the wire will occupy a central position with respect to the spring and the strain will be centrally applied.

In the drawings A A represent the wires of 40 a fence secured to suitable posts B B by sta-

ples or other usual means.

The tension device shown in Figs. 1, 2, and 3 which is my preferred form consists of the spiral spring C and a pair of self centering plates consisting in this instance of washers or rings D having outer curved peripheral portions which engage the ends of the spring.

To apply my improved tension device the wire is cut, and sufficient slack provided to so allow both ends to be passed through the

spring from opposite directions, where they are secured each to one of the washers D D in any usual manner. When the slack is released and the wires tightened the washers will be pulled against the ends of the spring 55 as clearly shown in Figs. 2 and 3 and will center themselves in the ends of the spring thereby applying the strain centrally at each end of the spring and maintaining the wires in a central position within the spring. The 60 wires also serve to guide the spring and prevent it from collapsing or bending laterally should it have a tendency to do so. This forms a very cheap and effective construction. The springs can be cheaply made by 65 winding the wire from which they are formed upon a mandrel and cutting off suitable lengths. The ends of the springs do not have to be treated at all but are simply placed in position with the self centering plate engag- 70 ing the ends.

In Fig. 4 I have shown a plate E consisting of a V-shaped piece of metal for engaging the ends of the spring and in Figs. 5 and 6 I have shown a self centering device consisting 75 of a cone shaped block F of metal or other material to which the fence wire B is secured. The block F is provided with a recess or aperture f to allow for the passage of the other portion of the wire. It will be observed that 80 the forms of wire supports shown in Figs 4,

5 and 6 are also self centering. In order to provide more of a central support for the spring, I sometimes prefer to reinforce each wire by doubling the wire around 85 the washer and securing it and then twisting the end of the wire about the other portion throughout the length of the spring as indicated in Fig. 3. The two reinforced wires passing through the spring will effectually prevent 90 the spring from buckling. I may also employ instead of the washer D, triangular plates or pieces of metal G provided with central holes or apertures for the attachment of the wire, as indicated in Fig. 7. These tri- 95 angular plates can be economically punched and cut from sheet metal as indicated in the figure and will form a desirable support for the wire.

It will be seen that all the forms of self roo

centering devices herein shown and described have sloping portions, inclined or curved, which engage directly with the ends of the spring.

What I claim, and desire to secure by Let-

ters Patent, is—

1. A tension device for wire fences consisting of a hollow coiled spring and self centering devices having sloping portions directly engaging the ends of said spring, the wires passing through the spring and being secured to said self centering devices, substantially as described.

2. The combination with adjacent portions of a fence wire, of a hollow coiled spring, self centering plates directly engaging the ends

of said spring each portion of said wire passing through said spring and being secured to one of said plates.

3. The combination with adjacent portions 20 of a fence wire, of a hollow coiled spring and rings secured to the portions of said wire, and having peripheral portions engaging the ends of said spring, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY C. PRATT.

Witnesses:

JOHN S. COE, MARY J. BUCKLEY. ~3