

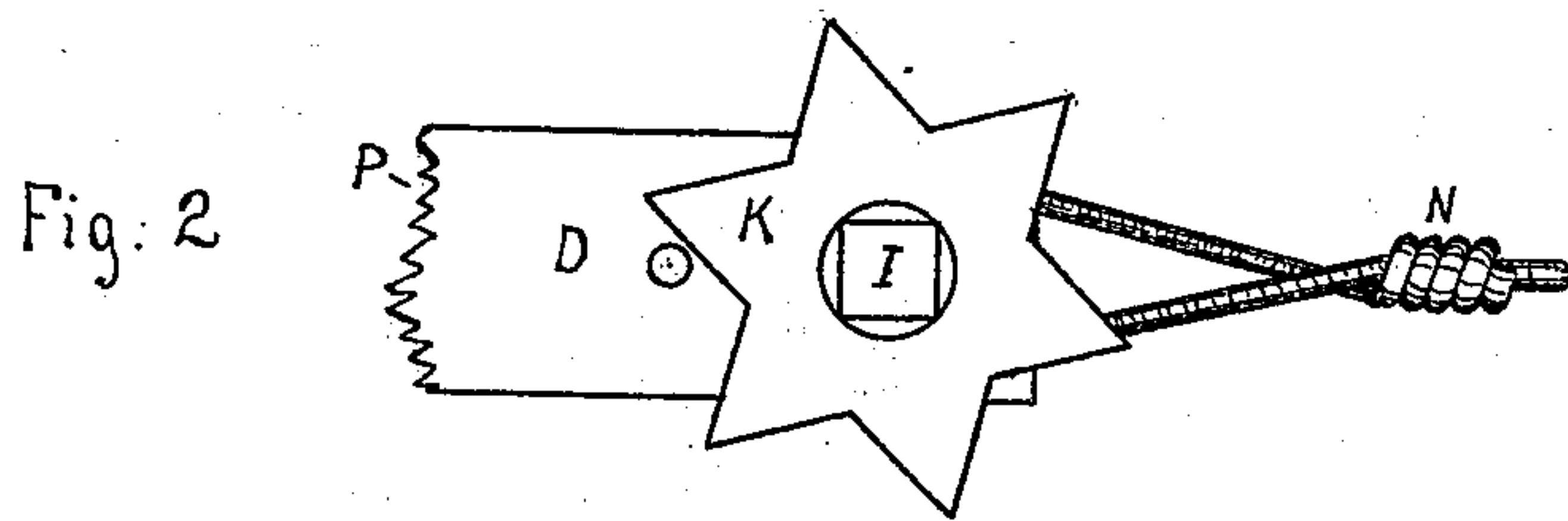
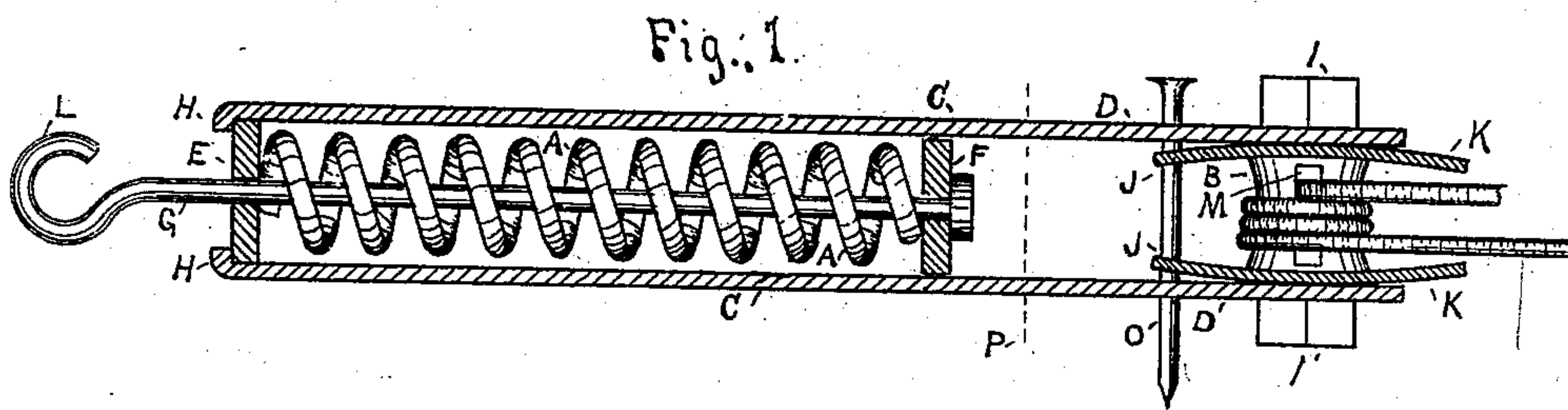
(No Model.)

W. A. BADGER.

COMBINED WIRE TIGHTENER AND SPRING TENSION FOR WIRE FENCES.

No. 548,737.

Patented Oct. 29, 1895.



WITNESSES:

Harry S. Draily.
W. H. Rowand

INVENTOR

Walter A. Badger.
BY J. H. Parker

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WALTER A. BADGER, OF BELLEFONTAINE, OHIO.

COMBINED WIRE-TIGHTENER AND SPRING-TENSION FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 548,737, dated October 29, 1895.

Application filed October 1, 1894. Serial No. 524,681. (No model.)

To all whom it may concern:

Be it known that I, WALTER A. BADGER, a citizen of the United States, residing at Bellefontaine, in the county of Logan and State of Ohio, have invented certain new and useful Improvements in a Combined Tightener and Spring-Tension for Wire Fences, of which the following is a specification.

This invention relates to permanent devices for tightening, separately, the horizontal wires of wire fences and for keeping the same in uniform tension throughout the year.

The construction of my invention will fully appear from the following description and accompanying drawings, wherein—

Figure 1 is a sectional view showing the spring-tension and reel-tightener combined. Fig. 2 is a view of the reel-tightener, showing the manner of permanently locking said reel.

By reference to the accompanying drawings it will be seen that I employ a coil-spring A to produce a yielding tension and a tightening-reel B of the ordinary pattern, combining the spring and reel by means of a sleeve C and projecting ears D D. The coil-spring A is incased by sleeve C to prevent the spring from buckling and also to protect the spring from storms of ice and snow.

A rod G, having a hook or eye L on one end, passes centrally through washer E and coil-spring A and is attached to washer F. The sleeve C is provided with an inwardly-projecting flange H for retaining washer E.

The tightening-reel B, as shown in Figs. 1 and 2, has both ends I I squared for attaching a wrench thereto, and is provided with star-shaped flanges K K, which, in connection with the extending ears D D and the wire nail O, as seen at J, Fig. 1, form a temporary lock therefor.

In connecting a fence-wire to the reel B, I pass the loose end of the wire through the mortise M far enough so that after the wire has been wound upon the reel till the desired tension is produced it can be returned to and coiled around itself, as seen at N, Fig. 2, thus forming a permanent lock therefor.

In connecting a fence-wire to the rod G, I pass the end of the wire through the hook or eye L and double said wire and coil the loose end around itself.

In applying my invention to a wire fence I attach one combined tightener and spring-tension complete to each horizontal wire of the fence anywhere along the line of the same between the terminal posts thereof.

In operating my device I attach a wrench to one of the squared ends I I of reel B and wind the fence-wire upon the reel till the desired tension is produced. If I desire to stop the reel temporarily, I pass a wire nail O between the star-points on flanges K K and through the extending ears D D, as seen at J, Fig. 1. If I desire to lock the reel permanently, I return the loose end of the fence-wire to and coil same around itself, as shown at N, Fig. 2.

It is obvious by reference to the accompanying drawings that when the fence-wire is tightened by means of reel B the coil-spring A will be compressed between washers E and F, thus producing a yielding tension.

Having described my invention, what I claim is—

1. A combined tightener and spring tension for wire fences, consisting of a spring actuated rod; a casing inclosing the same provided at one end with a retaining flange, and at the other with projecting ears; a reel having star-shaped flanges and a square ended shaft, journaled in said ears; and a removable stop pin, held in perforations formed in the ears adjacent to the bearings of the reel, all substantially as shown and described.

2. The combination with a spring actuated rod; a casing inclosing the same, provided at one end with a retaining flange, and at the other with projecting ears; a reel having star-shaped flanges and a square ended shaft, journaled in said ears, and a removable stop pin, held in perforations formed in the ears adjacent to the bearings of the reel; of a divided fence wire, one end of which is secured to the reel shaft, and the other to the extremity of the spring actuated rod, all substantially as shown.

WALTER A. BADGER.

Witnesses:

M. J. PARKER,
E. C. PARKER.