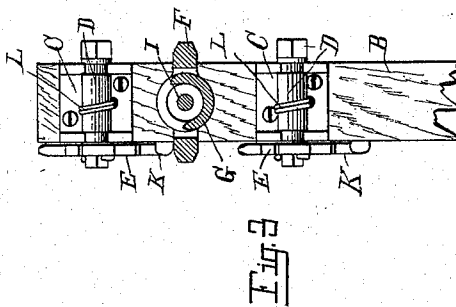
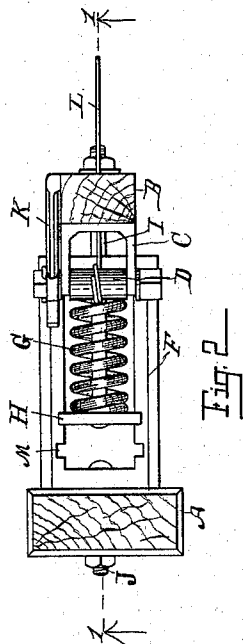
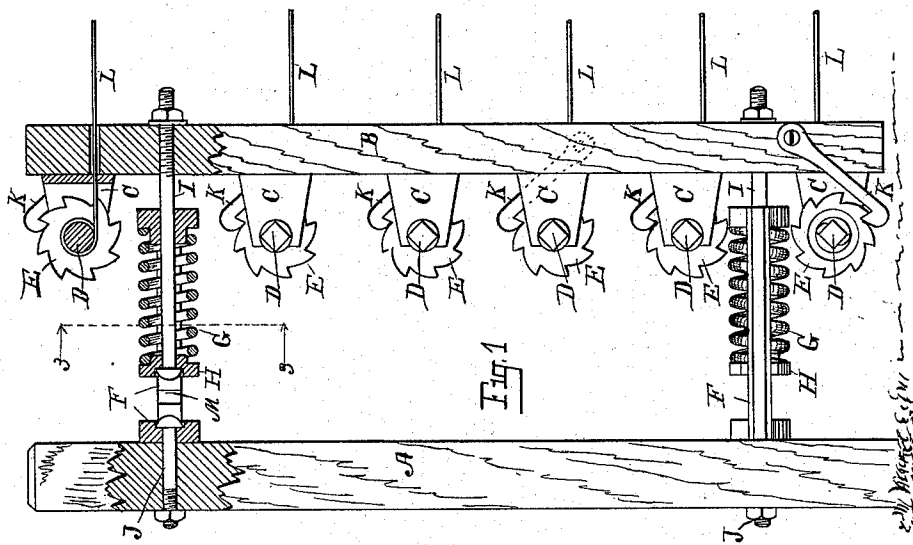


(No Model.)

M. O. HADDEN.
METALLIC FENCE.

No. 565,616.

Patented Aug. 11, 1896.



Witnesses:

Walter S. Wood
Marian Longyear

Inventor,

Mortimer O. Hadden
By *Fred L. Chappell*
Att'y.

UNITED STATES PATENT OFFICE.

MORTIMER O. HADDEN, OF DOWAGIAC, MICHIGAN.

METALLIC FENCE.

SPECIFICATION forming part of Letters Patent No. 565,616, dated August 11, 1896.

Application filed April 8, 1895. Serial No. 544,941. (No model.)

To all whom it may concern:

Be it known that I, MORTIMER O. HADDEN, a citizen of the United States, residing at the city of Dowagiac, in the county of Cass and State of Michigan, have invented certain new and useful Improvements in Metallic Fences, of which the following is a specification.

My invention relates to improvements in fences, and more particularly to the end post and means of attachment to an ordinary wire fence.

The objects of my invention are, first, to provide a strong tension device, which shall put stress upon all of the wires of the fence and at the same time leave each wire separately adjustable; second, to provide in a fence means so that the springs at the end of the fence resist the full force applied to any strand or to all of the strands; third, to provide improved means of attaching the springs to a fence, which compensate for the expansion and contraction due to heat and cold; fourth, to provide improved ratchets for adjustment of the wires of the fence. I accomplish these objects of my invention by the devices shown in the accompanying drawings, in which—

Figure 1 is a side elevation of the end post and means of attachment of the wires of a fence embodying the features of my invention, the upper portion of the same being shown in section on line 1 1 of Fig. 2. Fig. 2 is a top plan view of the part shown in Fig. 1. Fig. 3 is a sectional view on line 3 3 of Fig. 1. All of the sectional views are taken looking in the direction of the little arrows at the ends of the section-lines.

Similar letters of reference refer to similar parts throughout the several views.

A represents the end post of the fence, secured in the ground in any well-known manner.

F F are brackets secured to the fence by the bolts J. These brackets project outwardly from the post and are in the form of a rectangular frame, the inner portion of the outer end of which is formed into a head for receiving the heavy spring G. A head H is adapted to slip into the rectangular portion at the recess M and slides along the inner sides of the frame, fitting over the sides of the same that are fitted to serve as guides.

This head is adapted to receive the rear end of the heavy coiled spring G. Through both heads and longitudinally through the coil G the heavy bolt I extends. The upright bar or scantling B receives the bolt I and is secured in position by the same.

To the side of the scantling B toward the post A are secured brackets C, corresponding in number to the number of the wires of the fence. Each bracket contains bearings on the rear side. In each bracket C is a spool D, with a ratchet E at the end. The spools D are located just above or below the opening in the scantling for the passage of the wire. Pawls K, consisting of straight bars with a catch at the end, are pivoted to the side of the scantling B and drop into the ratchets E. They are hook-formed and engage the ratchet on the opposite side from the wire on the spool. The longitudinal wires of the fence L are wound around the spools D, and these are supported in the suitable notched bearings on the bracket C above mentioned. A suitable square head, similar to the head of a bolt, is on one side to receive a wrench or crank for putting tension upon the wires L.

It will be observed by this construction that the tension of the wires can be evenly adjusted, each one being capable of being wound separately and the heavy springs G and their special strong brackets receive it and hold the entire fence taut. When pressure is applied against any wire, the full force of the spring is exerted in retaining that wire in place, thus allowing the spring to be compressed to overcome the heavy strain without stretching the wire. The tension of the spring is such that the scantling, or, as it might be called, the "evener" B, moves back and forth, keeping the wires always taut without any likelihood of unduly straining them.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination in a fence, of a post, A; a scantling, B; a bracket, F, in the form of a rectangular frame having notches M therein with a head inside the outer end supported on the post, A, by the bolts, J; a head, H, adapted to be inserted into the brackets, F, at the notches, M, and to be guided on the inner side of said bracket; the heavy coiled

spring, G, adapted to be placed between the head, H, and the head at the inside of the outer end of the bracket, F; a bolt, I, adapted to pass through the heads and coiled spring, G, and attach to the scantling, B; brackets, C, C, corresponding to the number of wires in the fence; spools, D, bearing ratchets, E, placed just above or below the apertures for the passage of the wires, L; a hook formed of the pawls, K, pivoted to the scantling, B, and adapted to hook into the ratchet, E, to permit of an independent adjustment of the tension on the wires of the fence, all coacting together substantially as described for the purpose specified.

2. The combination, in a fence, of a post, A; a scantling, B; a bracket, F, formed of a rectangular frame having notches M therein with a head inside of the outer end supported on the post, A; a head, H, adapted to be inserted into the bracket, F, at the notch, M, and to be guided on the inner side of said bracket; a heavy coiled spring, G, adapted to be placed between the head, H, and head

at the inside of the outer end of the bracket, F; a bolt, I, adapted to pass through the heads and coiled spring, G, and to attach to the scantling, B; and suitable means of securing the wires of the fence to the scantling, B, all coacting together as described.

3. In a tension device for a fence, the combination with the post, A, of the rectangular frame-bracket, F, having notches M with a head at the inner side of the outer end; a head, H, adapted to be inserted into the frame, F, at the notches, M and be guided inside of said frame; a heavy coiled spring, G, adapted to be placed between the heads; and bolt, I, adapted to pass through the head and coiled spring and attach to put stress upon the strands of the fence, as specified.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

MORTIMER O. HADDEN. [L. S.]

Witnesses:

BURGETTE L. DEWEY,
MARVIN DEFURDORF.