

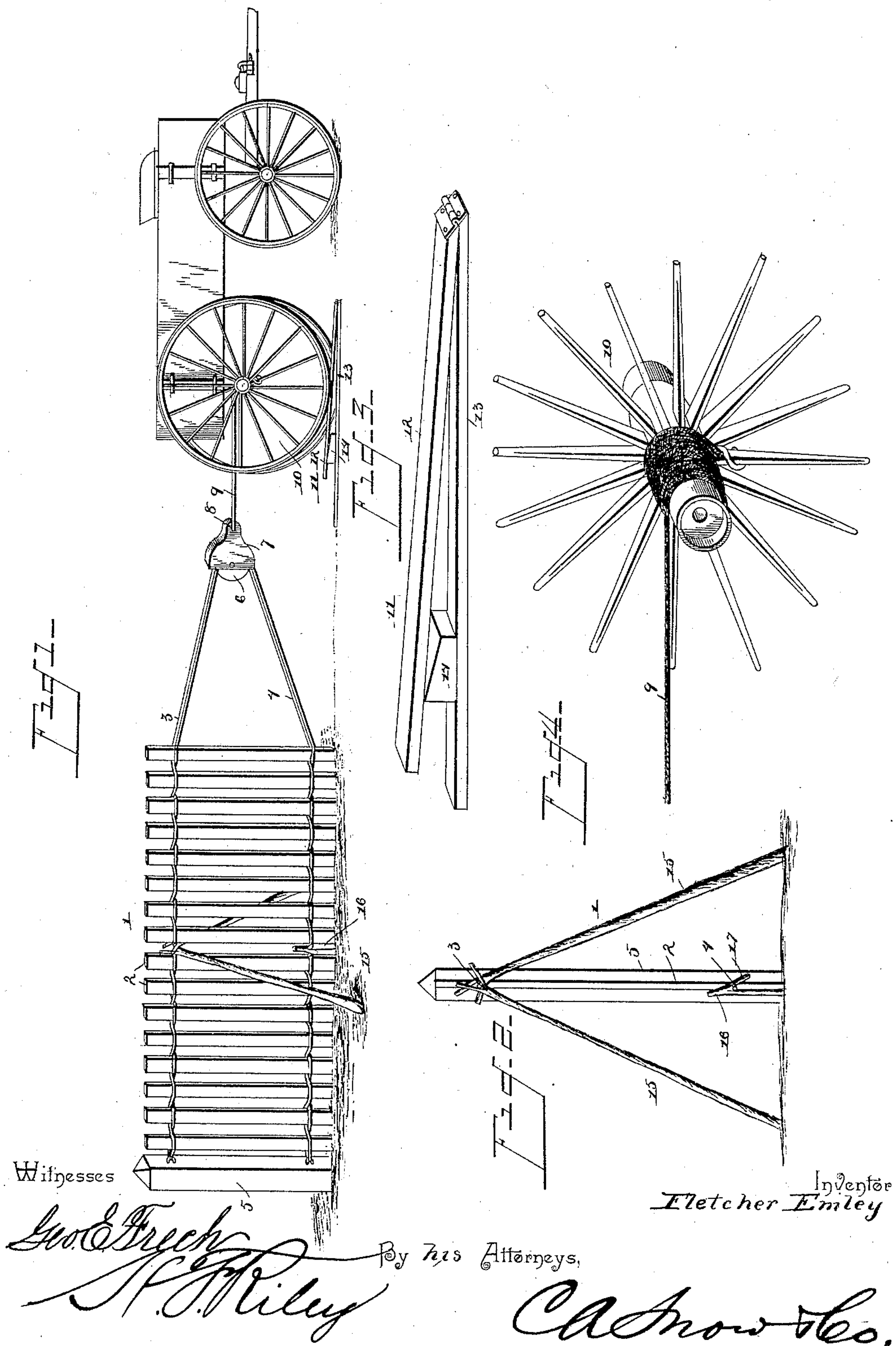
(No Model.)

F. EMLEY.

TENSION DEVICE FOR SLAT AND WIRE FENCES.

No. 445,547.

Patented Feb. 3, 1891.





# UNITED STATES PATENT OFFICE.

FLETCHER EMLEY, OF ROME, GEORGIA.

## TENSION DEVICE FOR SLAT-AND-WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 445,547, dated February 3, 1891.

Application filed July 3, 1890. Serial No. 357,648. (No model.)

*To all whom it may concern:*

Be it known that I, FLETCHER EMLEY, a citizen of the United States, residing at Rome, in the county of Floyd and State of Georgia, have invented a new and useful Apparatus for Constructing Fences, of which the following is a specification.

The invention relates to improvements in wiring wood fences.

10 The object of the present invention is to enable a uniform tension to be maintained throughout a wire-and-wood fence and provide a tension device of simple and inexpensive construction, capable of automatically  
15 and gradually releasing the strands of wire to maintain an even strain as the fence is being woven and the pickets inserted between the strands.

20 A further object of the invention is to enable the pickets to be readily made up of palings, poles, and timber of varying thicknesses, and as the larger and heavier portions of the material forming the pickets are arranged at the bottom of the fence to enable  
25 the upper and lower strands to adjust themselves to the size of the picket and to run out evenly and extended the same distance.

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

In the drawings, Figure 1 is a perspective view illustrating the invention and showing  
35 the devices applied in operative position. Fig. 2 is a vertical sectional view of a fence, illustrating the manner of supporting the same. Fig. 3 is a detail view of the wheel-lock. Fig. 4 is a detail perspective view illustrating the  
40 manner of attaching the cable to the hub of the wheel.

Referring to the accompanying drawings, 1 designates a fence composed of vertical palings 2 and strands of wire 3 and 4, arranged at  
45 the top and bottom of the fence and having their ends secured to a post 5. The strands are arranged in pairs and are continuous at the end of the fence where the weaving of the panels or palings is performed, and pass  
50 around a grooved sheave or pulley, and the various strands are adapted to readily adjust

themselves to the varying size of the wood employed to build the fence and to run out evenly and extend the same distance, which would not be the case if the strands were not  
55 continuous, as the heavier portion of a paling is placed at the bottom of the fence, thereby requiring more wire to weave the bottom of the fence than the top. The sheave or pulley 6 has its periphery grooved to prevent the wires  
60 slipping off it, and it is mounted in a suitable casing 7, which is provided with bearings, in which is journaled a suitable shaft or bolt carrying the pulley or sheave, and the said casing is provided with a clip or eye 8, to  
65 which is attached one end of a cable or rope 9, that has its other end secured to the hub of a wheel 10 of an ordinary farm-wagon. The wagon is securely fastened to the ground, and one side is sufficiently elevated to raise  
70 the wheel 10 and permit free rotation of the same. The wheel 10 is rotated, and the cable or rope 9 is wound upon the hub until sufficient tension is given the strands 3 and 4 of the fence, and then a wheel-lock 11 is placed  
75 beneath the wheel and sufficient friction exerted upon the tire to prevent rotation of the wheel until the tension on the wire by the weaving of the fence has exceeded its normal condition. As the tension of the wires in-  
80 creases, the friction caused by the wheel-lock is overcome and the wheel is gradually and slowly rotated without any jerks to pay out the cable and thereby decrease the tension of the strands. By this construction a regular  
85 and uniform tension is automatically maintained, and the tension device requires no attention, and the operation of weaving may be uninterruptedly carried on.

The wheel-lock is composed of two boards 90 12 and 13, hinged together at one end, and a wedge-shaped block 14, adapted to be driven between the boards to separate the same and exert any desired amount of friction upon the wagon-wheel 10, under which the wheel-  
95 lock is placed.

The fence only requires two posts, and it is preferably braced throughout its length by cross-stakes 15, which may be conveniently cut with prongs at their upper ends to receive  
100 the top strand of wire, and the lower strand is maintained in its proper position and pre-

vented being forced upward by the inclined stakes by a stake 16, provided with an inverted prong 17 to receive the strand.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will be readily understood.

What I claim is--

The combination of the casing 7, the pulley journaled therein and adapted to receive the continuous strands 3 and 4 of a fence, the wheel 10, the rope connected to the wheel and

the casing, and the wheel-lock arranged to engage the wheel, and consisting of the boards 12 and 13, hinged together, and the wedge-shaped block adapted to spread the boards, substantially as described.

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

FLETCHER EMLEY.

Witnesses:

J. O. PERRY,  
A. ABSENGER.