(No Model.)

F. H. BISSELL.

STRETCHER FOR WIRE FENCES.

No. 422,494. Patented Mar. 4, 1890.

Fig. 4.

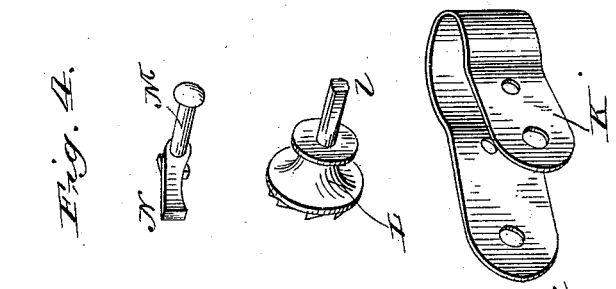


Fig. 2.

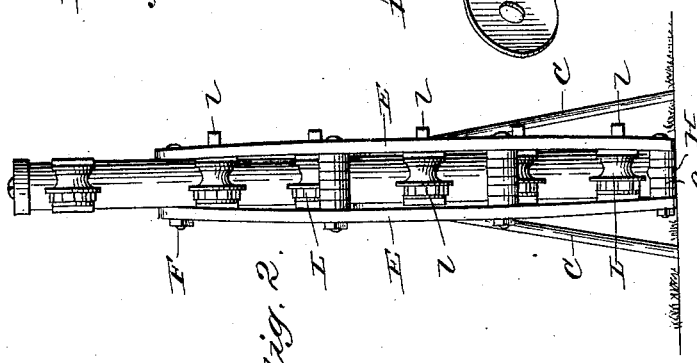
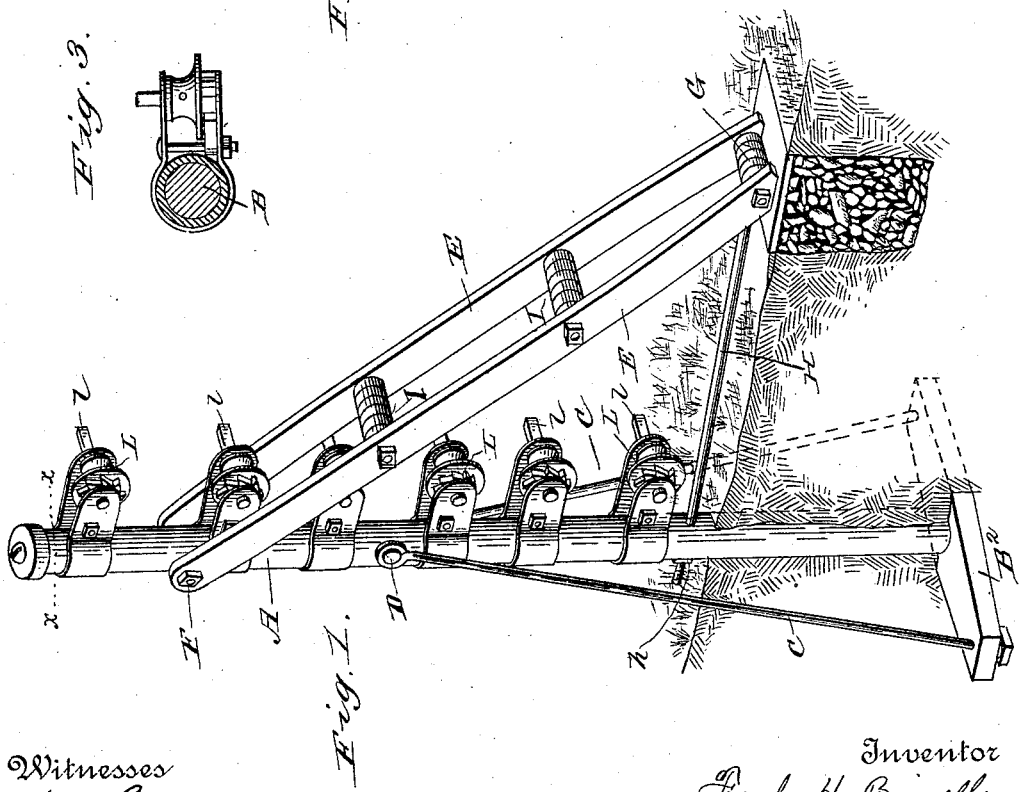


Fig. 3.

Fig. 1.



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FRANK. H. BISSELL, OF ORWELL, OHIO.

STRETCHER FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 422,494, dated March 4, 1890.

Application filed April 9, 1889. Serial No. 306,560. (No model.)

To all whom it may concern:

Be it known that I, FRANK. H. BISSELL, of Orwell, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Stretchers for Wire Fences; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompany drawings, forming a part of this specification, and to the letters of reference marked thereon.

The object of the invention is to produce a post of great simplicity and durability at a minimum cost, particularly a post which is especially adapted to be employed at stated intervals in a wire fence or at the corners, for the purpose of straining the wires and keeping them taut.

The invention therefore consists in certain novel details of construction and combinations and arrangements of parts, as will be hereinafter described at length, and pointed out particularly in the claim at the end of this specification.

In the accompanying drawings, Figure 1 is a perspective view of a post constructed in accordance with my invention. Fig. 2 is a front elevation showing the brace. Fig. 3 is a sectional view on the line *x x*, Fig. 1. Fig. 4 is a view of the parts of one of the stretchers detached.

Similar letters indicate the same parts in all the figures.

The post proper A, in the preferred construction, is formed of tubular iron—such as gas-pipe—which in some instances it is found desirable to stiffen and brace by inserting a core of wood B, driven in from one end or the other, if the post is formed from a tube, or having the post formed around it if the post is of thin sheet metal, as will be readily understood. In order to form additional lateral supports, and also for the purpose of holding the bottom piece or anchor B^2 in position, I provide brace-rods C C at each side, attached at one end by eyes to the side of the post about midway of its height, preferably by means of a bolt D, passing clear through, the opposite ends being secured to the ends of the bottom piece or anchor.

The brace for resisting the strain brought to bear on the post by the wires is formed by the two side pieces E E, one secured at the upper end to each side of the post, preferably by a bolt F, similar to bolt D, the lower ends being connected by a cross-piece G, which is in turn connected to the base of the post by a rod H, which preferably passes through the post and has a nut on the rear end for the purpose of adjusting the lower end of the brace with relation to the post. It is found in practice that the brace just described is open to some objections, in that the side pieces, which of necessity are of quite light material in order to make the post portable and sightly, will bend when the great strain of the wires is thrown on them, usually springing apart and allowing the post to give to a greater or less extent. Now, to overcome this defect and at the same time construct the parts of light material, I unite the braces by cross-pieces I, usually two in number, and in order to prevent all liability of the braces to bend both in the same direction I bow or bend them apart at the center, as shown in Fig. 2, thus forming an absolutely-rigid brace, which, when united to the post at both ends, as described, cannot give in any direction.

The stretchers (shown in detail in Fig. 4) are formed, preferably, of a piece of strip or sheet metal K, which passes clear around the post and has apertures or holes in its ends for the reception of the trunnions of the ratchet-wheel and wire-spool L, which latter are preferably cast in one piece with the squared end trunnion *l* on one end, as shown, for the accommodation of the winding handle or tool.

A single bolt M serves to clamp the stretcher in position on the tubular post, and by thus drawing the ends of the piece K together holds the ratchet-wheel and wire-spool in place, and this bolt further serves as the pivot for the pawl N, which, dropping by gravity, engages the ratchet-wheel and prevents the rotation of the same backward to loosen the wire.

The stretchers, it will be seen, can be placed in any position on the post, thus enabling some of the wires, as those at the bottom of the fence, to be brought close together and enabling the level of the wire to be maintained without the necessity of providing a special post for each varying condition, as is found necessary when the posts are provided with special attaching devices for the stretchers.

The pawl N is not readily accessible or liable to be maliciously released, as it lies close to the side of the strip K and entirely below the edge of the same, and, further, requires no special pivot, as the single clamping-bolt answers all purposes.

Stretchers of this kind are particularly well adapted for application to a tubular post, as the portion of the stretcher passing around the post can be tightened around the whole surface, thus preventing all danger of slipping and at the same time dispensing with the necessity of perforating the post or attaching the stretcher by other means which are found inconvenient and impractical. In order to prevent the end of the brace, which is located slightly above the ground, from being pressed down, a hole is usually dug under the said end and filled with small stone or gravel, a flat stone or piece being placed on top for the brace to rest on.

Having thus described my invention, what I claim as new is—

In a stretcher for wire fences, the combination, with the sheet-metal body portion having the circular central portion and straight ends with oppositely-arranged perforations therein at the ends and near the central portion, of the winding-spool having the ratchet-wheel and outside bearing at one end and the squared bearing at the opposite end journaled in the perforations in said ends, the bolt passing through the perforations between said ends and the central portion for drawing them together to retain the spool and clamp the post, and a pawl pivoted on said bolt and engaging the ratchet-wheel, substantially as and for the purpose specified.

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