Nov. 27, 1923. 1,475,415

C. SWANSON

FENCE

Filed June 20, 1921

Fig. 1.

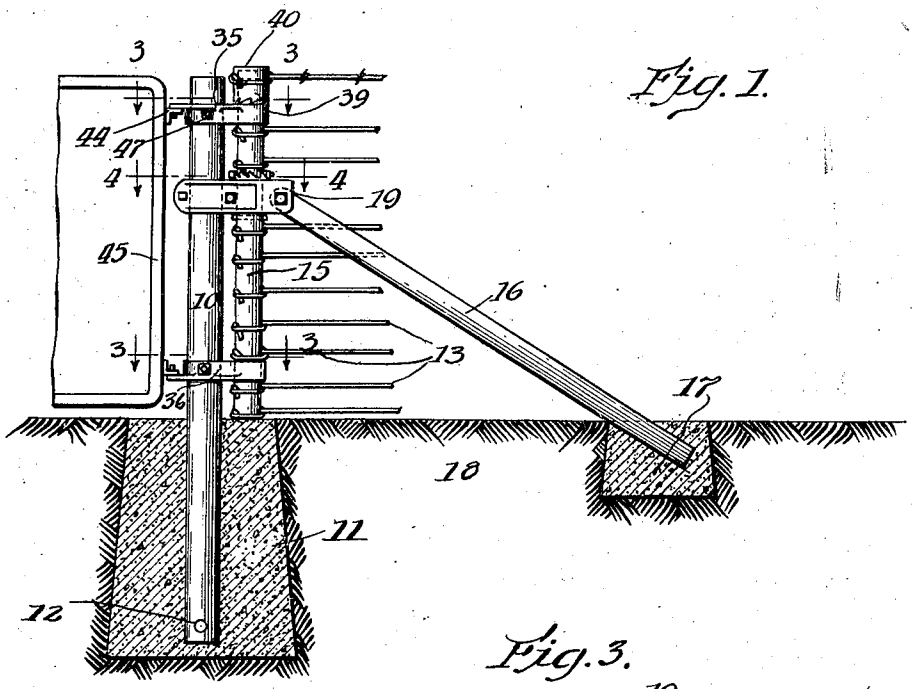


Fig. 3.

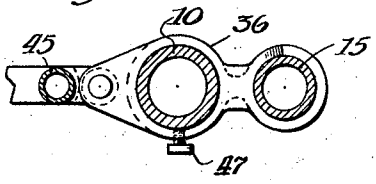


Fig. 2.

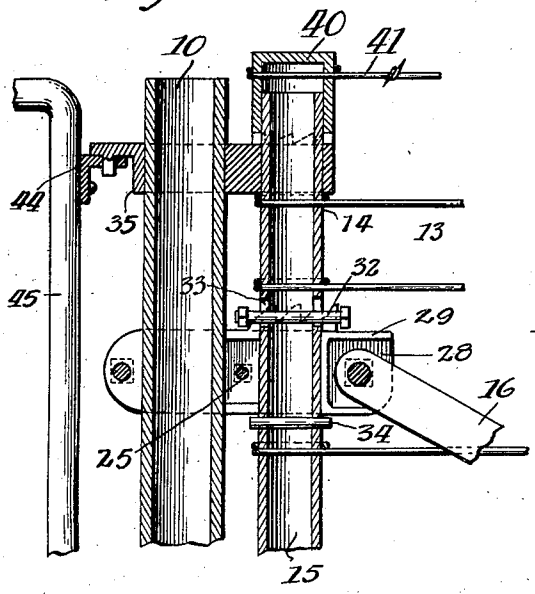


Fig. 4.

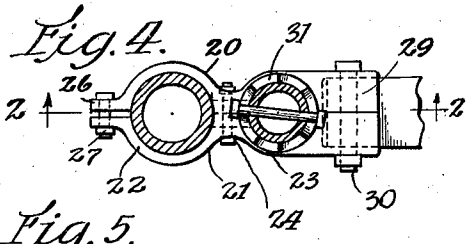
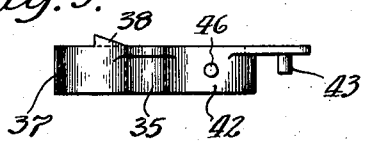


Fig. 5.



Inventor:
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Atty.

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UNITED STATES PATENT OFFICE.

CHRISOPHER SWANSON, OF LAPORTE, INDIANA.

FENCE.

Application filed June 20, 1921. Serial No. 478,916.

To all whom it may concern:

Be it known that I, CHRISOPHER SWANSON, a citizen of the United States, and a resident of Laporte, in the county of Laporte and State of Indiana, have invented certain new and useful Improvements in Fences, of which the following is a full, clear, and exact specification.

My invention is concerned with wire fences, and is designed to furnish an improved post and wire fence construction, which can be easily erected and one in which if the wires become loosened, they can be quickly tightened without the employment of any special apparatus.

To illustrate my invention, I annex hereto a sheet of drawings in which the same reference characters are used to designate identical parts in all the figures, of which—

Fig. 1 is a side elevation showing a portion of a fence embodying my invention;

Fig. 2 is a central vertical section through the upper portion thereof, as if on the line 2—2 of Fig. 4;

Figs. 3 and 4 are horizontal sections on the lines 3—3 and 4—4 of Fig. 1; and

Fig. 5 is a side elevation of one of the bearings.

In carrying out my invention in its preferred form, I employ a post 10, which might be of any desired shape, such as an angle iron or a T bar, but which preferably takes the form of a two inch tube, the lower portion of which is embedded in the concrete 11 and may be anchored therein by the cross-pin 12 at the bottom. The wire strands 13, which may be of any desired construction and arrangement, having their ends passed through apertures 14 in the tightening shaft 15, which preferably takes the form of an inch and a half tube. The main feature of my invention is concerned with a novel bearing for the shaft 15, which bearing is supported from the post 10, which bearing also has a socket for the brace bar 16, which may be of any desired construction, and has its lower end embedded in the concrete 17 placed in the ground 18 for that purpose.

In the preferred form shown, the bearing member 19 is preferably formed of two substantially symmetrical castings 20 and 21, said castings having at one end the semi-circular portions 22 of the proper internal diameter to clamp upon the post 10, and it will of course be understood that if some other shape of post were used, the design of this portion of the bearing would be modified accordingly, so as to be clamped upon the particular design of post employed. The castings 20 and 21 have the central portion 23, which is semi-circular in its inner face in cross-section, the parts 22 and 23 being connected by the narrow neck 24 having apertures therethrough for the clamping bolt 25. The outer ends of the parts 22 have the ears 26 with apertures therethrough for the clamping bolt 27. The other ends of the members 20 and 21 have the vertical walls 28 and the top portions 29, which together form the socket to receive the end of the brace bar 16, which is held in place by the bolt 30 passed through apertures in the side portions 28. The upper sides of the castings 20 and 21 have the semi-circular sets of ratchet teeth 31 thereon which co-operate with the bolt 32 arranged to rise and fall in the slots 33 formed in the tightening shaft 15 just above the top of the members 20 and 21, and it will be understood that as the shaft 15 is turned, the bolt 32 will be raised by the inclined sides of the teeth until the points are passed, when it will fall down, holding the shaft securely in any new position to which it may be turned. To prevent the possibility of the shaft 15 from rising when it is turned and thus failing to allow the bolt 32 to fall and co-operate with the teeth, I pass the pin 34 through the shaft just below the castings 20 and 21, as seen in Fig. 2. When the parts are assembled and the bolts 24 and 27 and 30 are tightened up it will be obvious that the bearing member is securely clamped on the post 10 and that the post 10 is securely braced against the pull of the wires 13 by the brace rod 16, and that the tightening shaft 15 is free to turn in the direction necessary to tighten up the wires 13. While I might make the bearing member 19 of sufficient width to serve alone as a bearing, except for its interference with the wires 13, I preferably make it comparatively narrow, as shown, and furnish the necessary additional bearings by the use of the bearing castings 35 and 36, which might be identical, but which I preferably vary by placing on the ring end 37 through which the shaft 15 passes, the ratchet tooth 38 which co-operates with the ratchet teeth 39 on the bottom edge of the inverted cap 40 which I place on the top of the shaft 15 and provide with apertures through which the top strand 41,

which is ordinarily barbed wire is passed, so that by turning the cap 40, this barbed wire strand can be tightened, the cap 40 being held in whatever position of adjustment is desired by its teeth 39 co-operating with the tooth 38. The bearing castings 35 and 36 also have the ring portions 42 through which post 10 passes, and I may support these bearing castings 35 and 36 in place simply by allowing the ring portions 37 to rest on the top of the wire 13 that happens to be directly beneath them. I have, however, illustrated these castings as provided with the hinge pintles 43 which may be used to co-operate with the hinge members 44 of a gate 45 in case the post is employed in connection with a gate. In that case, I preferably provide the ring portions 42 with the threaded apertures 46 through which set-screws 47 may be passed to engage the post 10 and to secure the gate from any possible vertical movement due to vertical displacement of the bearings 35 and 36.

While I have shown and described my invention as embodied in the form which I at present consider best adapted to carry out its purposes, it will be understood that it is capable of modifications, and that I do not desire to be limited in the interpretation of the following claims, except as may be necessitated by the state of the prior art.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. In a fence, the combination with a post, of a tightening shaft journaled parallel with and adjacent thereto, a brace bar co-operating with the post, a bearing and detent member secured to the post intermediate its ends, said member having a recess to co-operate with the post, a bearing for the shaft, a socket for the brace bar, wires secured to the shaft, detent mechanism between the shaft and the member, consisting of ratchet teeth on the member about the upper edge of the bearing, and a transverse pin extending through an elongated slot in the shaft.

2. In a fence, the combination with a post, of a tightening shaft journaled parallel with and adjacent thereto, a brace bar co-operating with the post, a bearing and detent member secured to the post intermediate its ends, said member having a recess to co-operate with the post, a bearing for the shaft, a socket for the brace bar, wires secured to the shaft, detent mechanism between the shaft and the member, an additional bearing for the shaft carried by the post, a cap on the top of the shaft, a wire secured to the cap, and detent mechanism between the cap and the additional bearing.

3. In a fence, the combination with a post, of a tightening shaft journaled parallel with and adjacent thereto, a brace bar co-operating with the post, a bearing and detent member secured to the post intermediate its ends, said member having a recess to co-operate with the post, a bearing for the shaft, a socket for the brace bar, wires secured to the shaft, detent mechanism between the shaft and the member, an additional bearing for the shaft carried by the post, a cap on the top of the shaft, a wire secured to the cap, and detent mechanism between the cap and the additional bearing consisting of a plurality of ratchet teeth on the bottom of the cap and a tooth on the top of the bearing.

4. In a fence, the combination with a post, of a bearing and detent member consisting of a plurality of bearing castings clamped thereon and collectively surrounding it, said castings combining to form a clamp for the post, a bearing for a tightening shaft, and a socket for a brace bar, a tightening shaft journaled in the bearing, wires secured to the tightening shaft, a brace bar co-operating with the socket, and ratchet mechanism between the shaft and the bearing and detent member.

5. In a fence, the combination with a post, of a bearing and detent member consisting of a plurality of bearing castings clamped thereon and collectively surrounding it, said castings combining to form a clamp for the post, a bearing for a tightening shaft, and a socket for a brace bar, a tightening shaft journaled in the bearing, wires secured to the tightening shaft, a brace bar co-operating with the socket, ratchet mechanism between the shaft and the bearing and detent member, and an additional bearing for the shaft carried by the post.

6. As a new and useful article of manufacture, a pair of symmetrical castings adapted to be bolted together and forming when so bolted together a clamping member for a post, a bearing for a tightening shaft, and a socket for a brace rod.

In witness whereof, I have hereunto set my hand and affixed my seal, this 11th day of June, A. D. 1921.

CHRISOPHER SWANSON. [L. S.]

Witnesses:
JAMES C. BUCK,
FRED R. LIDDELL.