(No Model.) 2 Sheets—Sheet 1.

J. M. FELLOWS.

JOINT FOR WIRE FENCES.

No. 419,758. Patented Jan. 21, 1890.

Fig. 1.

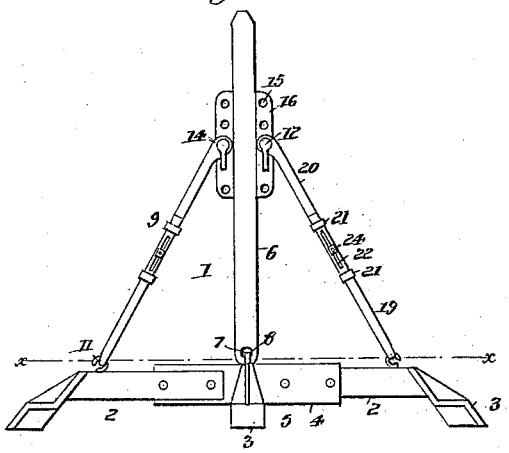


Fig. 2.

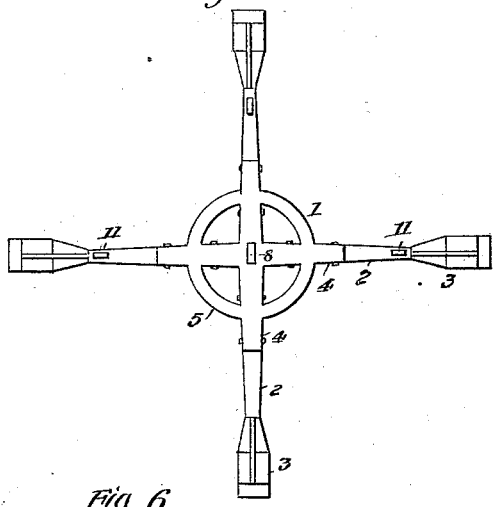


Fig. 3.

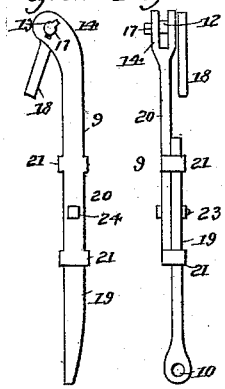


Fig. 4.

Fig. 5.

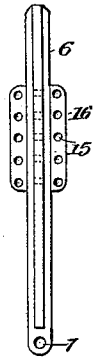


Fig. 6.

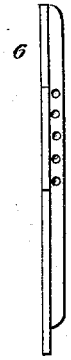


Fig. 7.

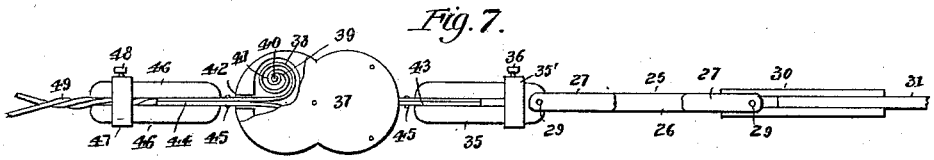
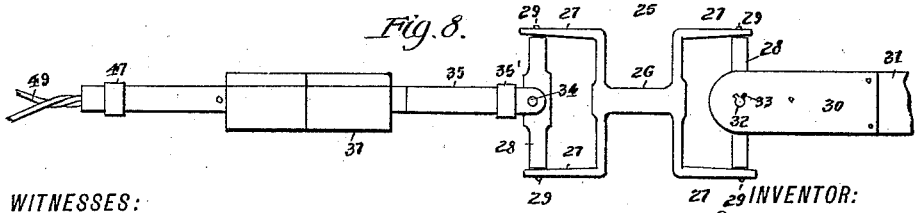


Fig. 8.



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(No Model.) 2 Sheets—Sheet 2.

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JOINT FOR WIRE FENCES.

No. 419,758. Patented Jan. 21, 1890.

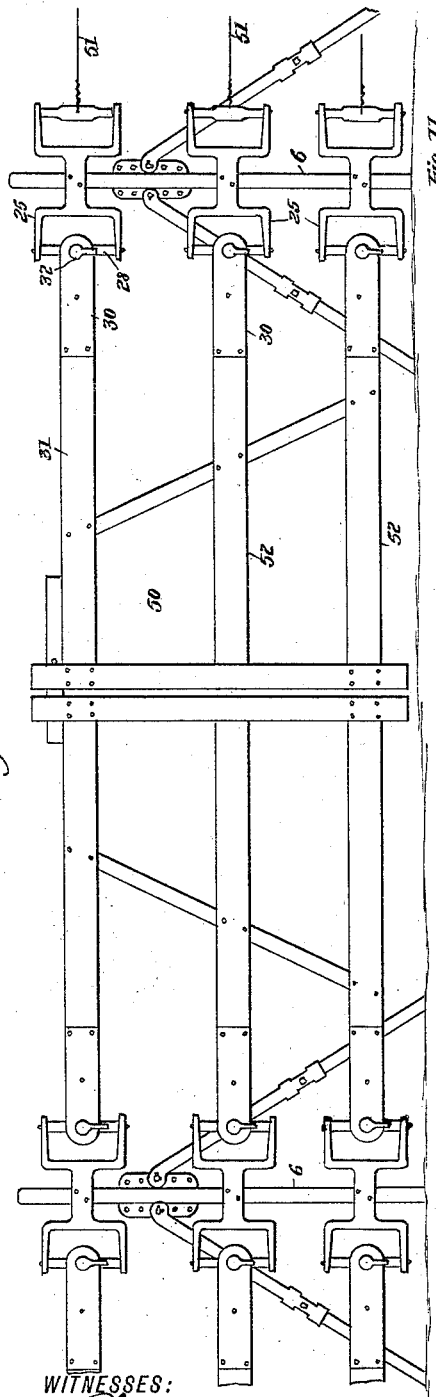

Fig. 9.

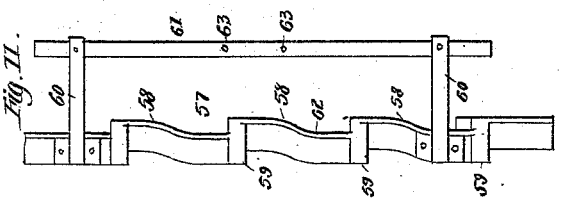

Fig. 11.

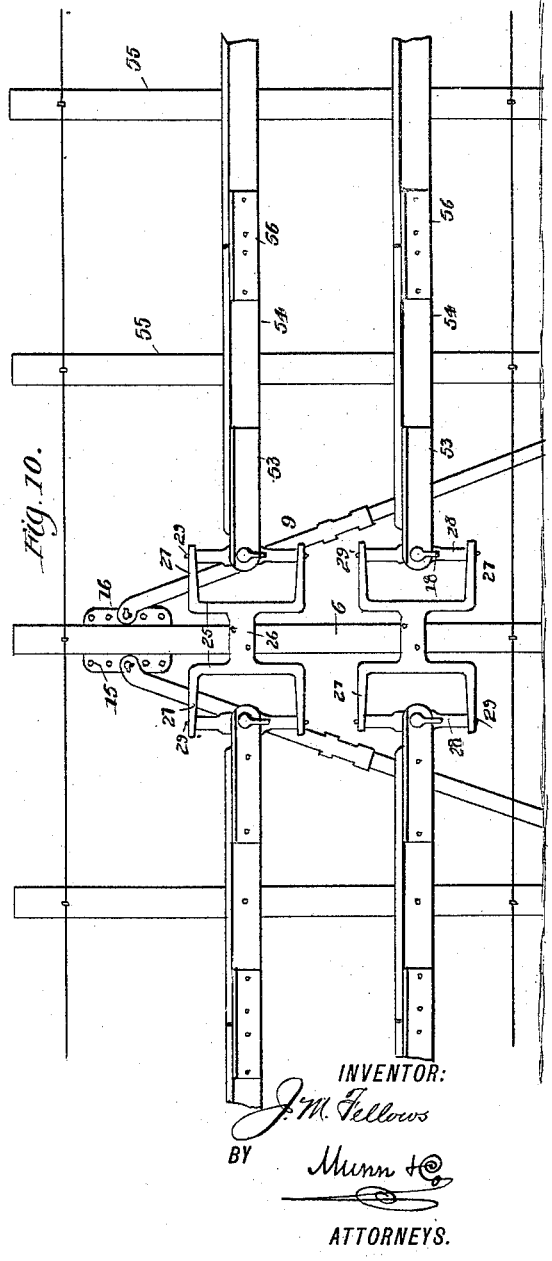

Fig. 10.

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JOHN M. FELLOWS, OF BURLINGTON, INDIANA.

JOINT FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 419,758, dated January 21, 1890.

Application filed April 19, 1889. Serial No. 307,650. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. FELLOWS, of Burlington, in the county of Carroll and State of Indiana, have invented a new and improved Joint for Wire Fences, of which the following is a full, clear and exact description.

This invention relates to an improvement in wire fences, and has for its object to provide a wire-fence joint by means of which fence-wires may be readily secured in place, will be adapted to extend at any angle and in any direction, and may be permitted to expand or contract.

The invention consists in a wire-fence joint constructed and arranged as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a view in elevation of a fence-post with my invention applied. Fig. 2 is a plan view thereof, in horizontal section, on the line *x x*, Fig. 1. Fig. 3 is a side view, and Fig. 4 an edge view, of one of the post-braces. Fig. 5 is a view in elevation of the post proper, with its base and braces omitted. Fig. 6 is an edge view thereof. Fig. 7 is a plan view of a wire-fence joint constructed in accordance with this invention, and shown as partly broken away. Fig. 8 is a side view thereof. Fig. 9 shows a portion of the joint employed in connection with the gate, and Fig. 10 shows a portion of the joint used in connection with a fence. Fig. 11 shows a modified form of fence-post.

In carrying out this invention I preferably employ the joint with a fence-post constructed as follows:

1 indicates a four-armed or cruciformed base consisting of the arms 2, having feet 3, the arms 2 overlapping the arms 4 of central piece 5, and being bolted thereto, as shown. By means of this construction a broad, strong, and steady base is provided.

6 indicates the fence-post proper, mounted on the base 1 by means of a perforation 7 in its lower end engaging a hook 8 on the central piece 5, so that it is permitted to swing thereon in adapting the base to inequalities in the surface of the ground. The post 6 is supported by brace-bars 9, having a perforation 10 in their lower end engaging a hook 11 on the arms 2, so that they may swing with the post 6, and are adjustably connected to the post 6 by means of a pin 12, projecting through slots or holes 13 in their forked upper end 14 and through one of a series of slots or holes 15 in flanges 16 on the post 6. The slots or holes 13 and 15 are of corresponding shape, and the pins 12 are formed with a projection 17, which is adapted to pass through the holes 13 and 15 and be turned to lock the pin 12 therein. The pin 12 is provided with an operating-handle 18, which hangs down by its own weight and holds the pin 12 in a locked position.

The brace-bars 9 are formed in two parts 19 and 20, the inner end of the part 19 extending through sleeves 21 on the inner end of the part 20 and overlapping the latter, and the overlapping parts being adjustably held together by means of a slot 22 in part 19 and a bolt 23 and nut 24. By this means the bars 9 may be lengthened or shortened, and by means of the pins 12 and perforated flanges 16 the fence-post 6 may be adjusted to vertical position as the base is inclined on uneven ground.

The wire-fence joint will now be described.

Referring to Figs. 7 and 8, in the construction of this joint I employ double U-shaped pieces 25, connected by a bar 26 and having mounted in their arms 27 a roller 28. The arms 27 of the pieces 25 are elastic, so as to permit of being sprung back to receive the pivot-pins 29 of the rollers 28. As many of the double U-shaped pieces 25 as there are fence-wires to be strung are secured to the post 6 at proper distances apart.

To one of the rollers 28 may be secured the forked end 30 of a fence-rail 31 by means of a locking-pin 32, engaging slots or holes 33 in the forked end 30 and roller 28, the pin 32 and holes 33 being similar in shape to the pin 12 and holes 13 and 15. To the other roller 28 is pivoted, by means of a pin 34, a forked clamp 35, having a sleeve 35′ and a clamping-screw 36.

37 indicates a casing containing the coiled-spring ends 38 of metallic strips 39, held in place by pins 40 in their looped ends 41, and projecting through openings 42 in the ends

of the casing 37. The projecting ends 43 and 44 of the strips 39 are held together by rivets 45, and the ends 43 are held by means of the clamp 35, while the ends 44 are held by clamping-blocks 46, having a clamping-sleeve 47 and set-screw 48. In the clamping-block 46 is also held the twisted end of a double-strand fence-wire 49.

By means of a fence-wire joint of the foregoing described construction not only may the ends of a fence-section be readily secured in place, but expansion and contraction of the fence-wires are also permitted by means of the coiled-spring ends 38 of the strips 39—that is to say, the fence-wires expand and contract by the effect of different degrees of temperature, and the coils 38 compensate for this by taking up the slack or relieving the tension of said wires, as the case may be.

In Fig. 9 the double U-shaped pieces 25 are shown in connection with a double swinging gate 50 and single strands of fence-wires 51, one of the rollers 28 in each double U-shaped piece 25 being connected by a forked end 30 with the horizontal rails 52 of the gate, and the other roller 28 having directly connected therewith the end of the single-strand fence-wire 51. The casing 37, with the spring-strips 39, the clamp 35, and the block 46 are omitted in the construction just described.

In Fig. 10 is shown a fence-post 6, with the double U-shaped pieces 25 having the rollers 28, connected by angular forked ends 53 with the angular fence-rail sections 54, mounted on posts 55. The angular fence-rail sections 54 are connected together by short angle-strips 56, bolted thereto, and the posts 55 may also have single wire strands mounted thereon, as shown. By means of this construction a strong and durable fence is provided.

In Fig. 11 is shown a modified form of post 57, adapted for stringing the fence-wires at corners, and consisting of the curved sections 58, out of perpendicular line with each other, and connected by the angular end joints 59. Adjacent to the top and bottom of the post 57 are mounted laterally-projecting bars 60, to which is connected a vertical bar 61. The post 57 is provided with perforations for the passage of the wires of a fence, and the bar 61 is provided with perforations 63 for the passage of the wires of a fence extending at an angle to the wires mounted on post 57.

By means of the fence-wire joint constructed in accordance with this invention not only may fence wires and rails be readily secured to posts and detached, but they may be permitted to extend in any direction and accommodate themselves to any irregularity of position of the posts, and also to expansion and contraction.

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

1. A wire-fence joint consisting of a double U-shaped piece having rollers mounted in the U-shaped portions, a casing having openings in its ends, and endwise-yielding spring-strips projecting through the openings, with clamps secured to the projecting ends of the spring-strips, one of which is secured to one of the rollers of the U-shaped piece and the other adapted to be clamped to the end of a fence-wire, substantially as shown and described.

2. In a wire-fence joint, the casing 37, with openings 42 in its ends, and the spring-strips 39, having coiled-spring ends 38 mounted in the casing, with ends 43 and 44 projecting through the openings 42, substantially as shown and described.

3. In a wire-fence joint, the casing 37, with openings 42 in its ends, the spring-strips 39, having coiled-spring ends 38, mounted in the casing, with ends 43 and 44 projecting through the openings 42, the forked clamp 35, engaging the end 43 and having the clamping-sleeve 35′ and set-screw 36, and the clamping-blocks 46, engaging the end 44 and having the clamping-sleeve 47 and set-screw 48, substantially as shown and described.

4. A wire-fence joint consisting of the double U-shaped piece 25, with roller 28, the forked clamp 35, pivoted to one of the rollers 28 and having the sleeve 35′ and set-screw 36, the casing 37, with openings 42 in its ends, and spring-strips 39, with coiled-spring ends 38 mounted in the casing 37, ends 43 and 44, projecting through the openings 42, the end 43 engaging the clamp 35, and the clamping-block 46, engaging the end 44 and having the sleeve 47 and set-screw 48, substantially as shown and described.

JOHN M. FELLOWS.

Witnesses:
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IDA GWINN.