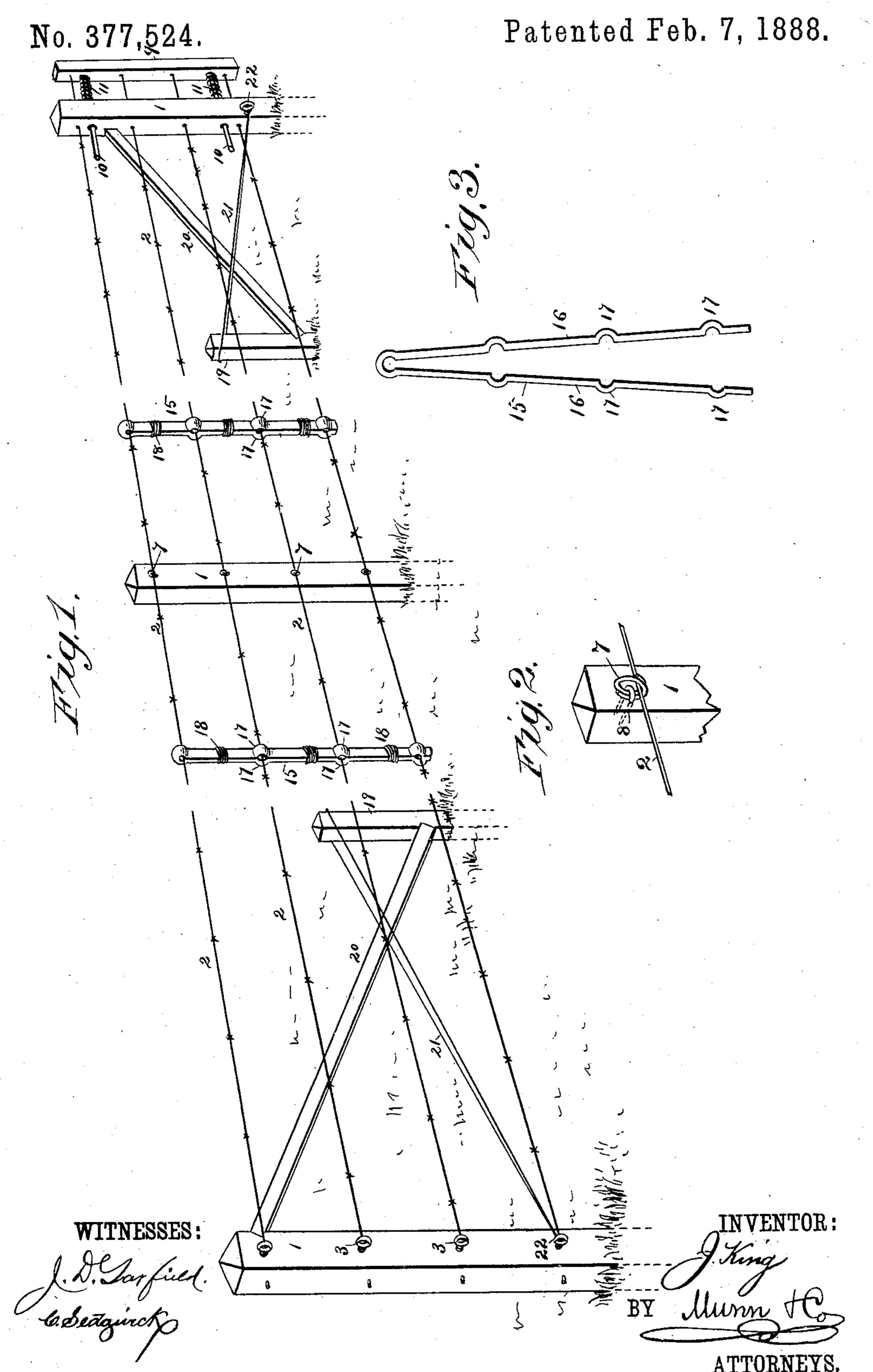
J. KING.

WIRE FENCE.



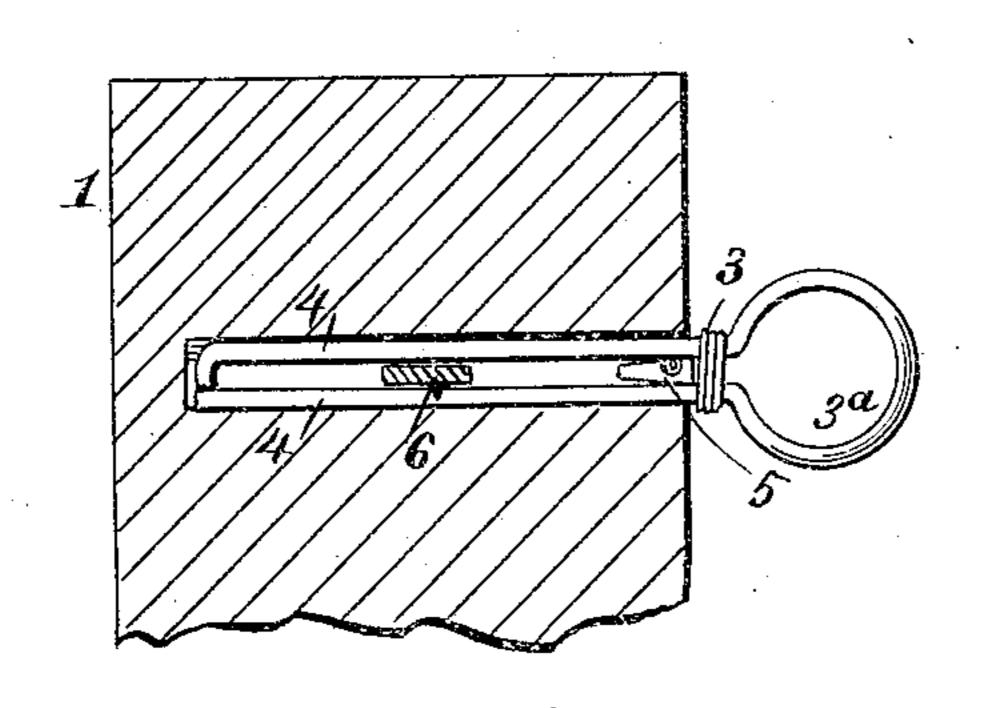
(No Model.)

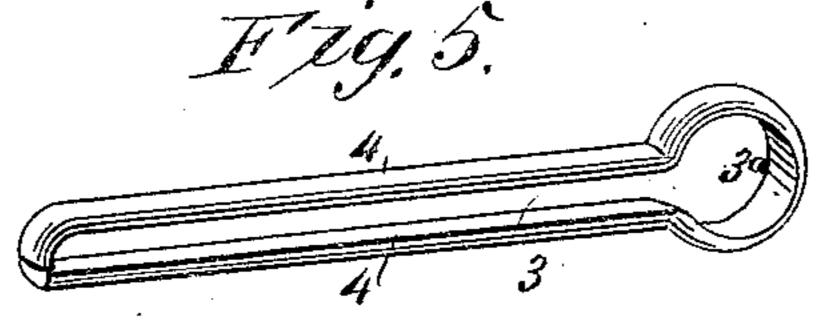
J. KING.

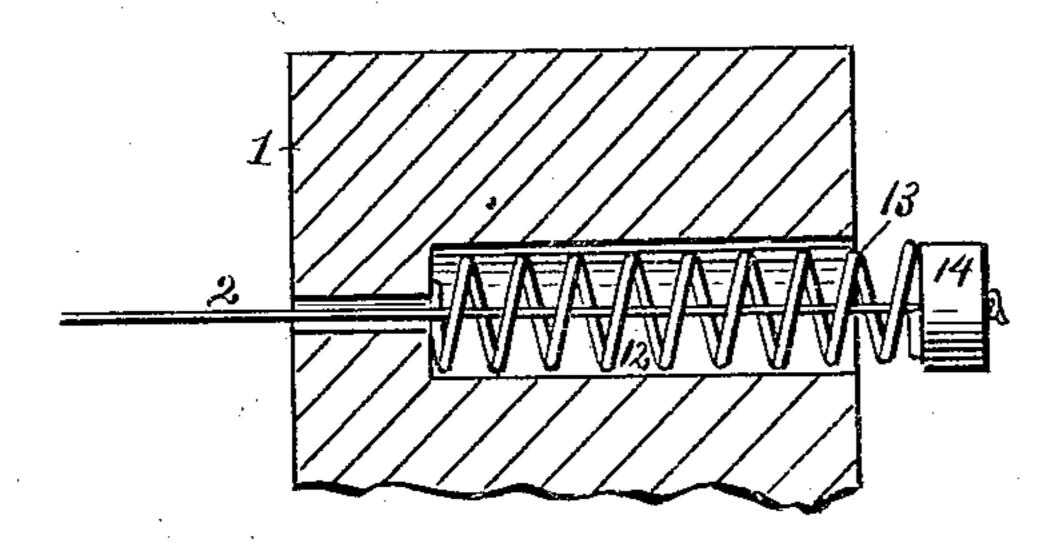
WIRE FENCE.

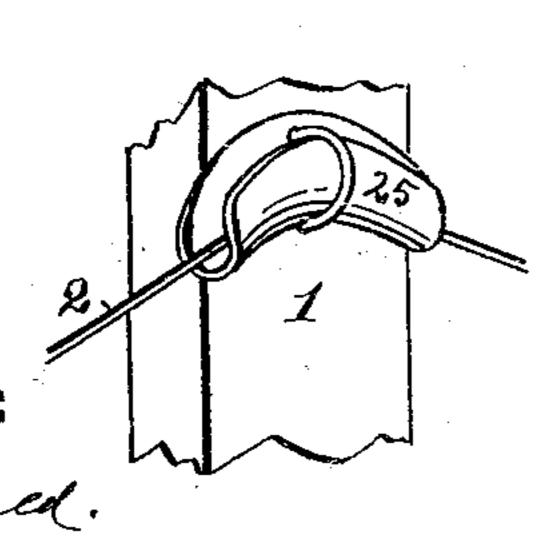
No. 377,524.

Patented Feb. 7, 1888.









INVENTOR:

ATTORNEYS.

## United States Patent Office.

## JAMES KING, OF SANDUSKY, INDÍANA.

## WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 377,524, dated February 7, 1888.

Application filed April 7, 1887. Serial No. 234,015. (No model.)

To all whom it may concern:

Be it known that I, James King, of Sandusky, in the county of Decatur and State of Indiana, have invented a new and Improved Fence, of which the following is a full, clear, and exact description.

My invention relates to an improvement in fences, and has for its object to produce a strong wire fence built of a few parts, neat and tasty to inappearance, and wherein the said fence may be built with ease upon undulating as well as level ground.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a perspective view of a section of fence; and Fig. 2, a partial perspective view of an intermediate post, illustrating the mode of attaching the wire thereto. Fig. 3 is an 25 edge view of the spacing or stay rods. Fig. 4 is a partial vertical section through an end post, illustrating the spool in position, whereby tension is brought upon the wire; and Fig. 5 is a perspective view of said spool. Fig. 6 is 30 a partial vertical section through an end post, showing the means whereby allowance is made for contraction and expansion; and Figs. 7 and 8 illustrate the connection of the wire with the posts when the fence is built upon undulating 35 ground.

In carrying out the object of the invention the necessary number of posts 1 are provided, placed at suitable distances apart. In one or both end posts, preferably one end post, in short spans, as illustrated, a series of apertures are made in one face at suitable distances apart, the space intervening the said apertures representing the desired distances between the strands of wire 2.

In each aperture aspool, 3, is inserted (shown in Figs. 4 and 5) constructed of oval or half-round iron turned flat side in, and so shaped as to form a circular head, 3a, and parallel members 4, the said members having their ends bent inward to approximate one another, in order that the wire may be passed between them without cutting the same.

The end of the wire designed for the top strand is passed between the members of the spool 3 and made to engage a slot in a wedge, 55 5, entered between the members of the spool near the head. A turn or two is then given the spool, causing the wire to wrap around it, and from one side of the post, through a suitable aperture, a bar, 6, is passed between the 60 members of said spool, preventing the same from turning. The wire is now continued along to the next post, and a small lap or split ring, 7, is sprung thereon, which ring is secured to the post by a staple, 8, or other equivalent 65 means, the wire being attached to each intermediate post in similar manner until the opposite end post is reached. If the span is a long one, the wire in the last or end post is preferably attached to spools 3 in manner here-70 tofore described. If, however, the span is short, provision must be made for expansion and contraction, to prevent the snapping of the wire in cold weather. This may be accomplished, as shown in Fig. 1, by passing the wire 75 through the post to an engagement with a vertical bar, 9, to the rear, which bar is provided at intervals its length with horizontal rods 10, the said rods being encircled by coil or spiral springs 11, and projected through suitable ap- 80 ertures in the said end post. The preferred means, however, for accomplishing the aforesaid result is illustrated in Fig. 6, and consists in boring a large aperture, 12, in the end post from the outer side nearly through the same, 85 and reducing the aperture the remainder of the distance to a diameter capable of accommodating the wire 2 only. The wire is thereupon passed through said aperture and a coil spring, 13, passed over the wire and into the enlarged 90 portion of the aperture 12. A washer, 14, is then secured to the projecting end of said wire. Thus when the wire is once tightened ample allowance is obtained for any amount of contraction and expansion. After the desired 95 number of strands have been placed in position the bars 6 are removed and the spools turned by any suitable instrument until the wires have received the proper degree of tension, when the said bars are replaced. Spac- 100 ing or stay rods 15 may now be made to intervene the post in any desired number, which rods are made in one piece from small rod iron or extra heavy wire, and are provided with

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two equal members, 16, having a series of aligning outwardly-curving surfaces, 17, of a number equal to the number of strands employed in the construction of the fence and of a distance apart similar to said strands. Therefore, when the stays are passed down over the strands, each curved surface will register with a strand. The members may then be fastened together by wire wrapping 18, or in any other approved manner. By this means a comparatively-closed fence may be constructed, of light weight, yet great elasticity and strength.

As a means of bracing the sections, short posts 19 are driven in the ground between the end and intermediate posts and in alignment therewith, the end posts being connected with the short posts 19 by a rigid brace, 20, which brace is upon one side of the wire strands, and also by means of a double wire, 21, passing over and attached to said short post near the top, extending upon the opposite sides of the strands 2 to a spool, 22, in the end posts at the bottom. Thus the end posts are held against the strain of the wires and prevented from twisting,

When the fence is to be built upon undulating ground, the rings 7 are dispensed with, and curved substantially U-shaped plates 25 are employed instead, as shown in Figs. 7 and 8, so the convex edges of the plates being made to

face upward, as shown in Fig. 7, upon elevations, and the same edges downward when the post is planted in a hollow, as illustrated in Fig. 8.

Having thus described my invention, what I 35 claim as new, and desire to secure by Letters

Patent, is—

1. In a wire fence, the combination, with the posts and the strands 2, of spools 3, held to turn in the end posts, provided with a circular head, 40 3<sup>a</sup>, integral members 4, and a slotted wedge, 5, intervening said members, adapted to hold the wire, and a bar, 6, passing through said end posts and between the members of said spool, substantially as shown and described.

2. In a wire fence, the combination, with the posts 1 and the strands of wire 2, and vertical stay-rods 15, embracing and spacing the several strands 2, of spools 3, held to turn in the end posts, provided with a head, 3°, integral 50 members 4, a slotted wedge, 5, intervening said members, a bar, 6, passing through said end posts and between the members of the spool, and lap-rings 7, adapted to secure the several strands to the intermediate posts, substantially 55 as shown and described.

JAMES KING.

Witnesses:

CHRIS. CENE,
PASCHAL T. LAMBERT.