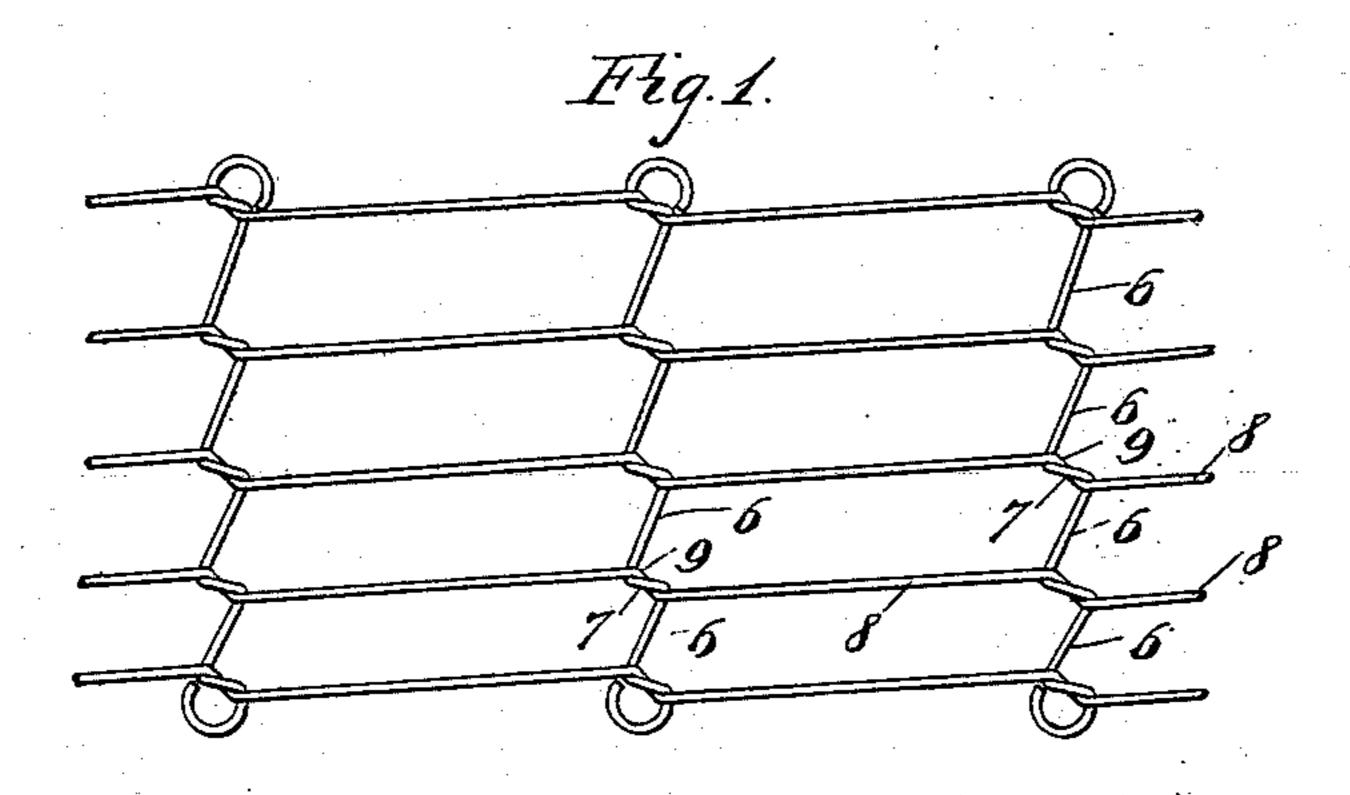
No. 637,632.

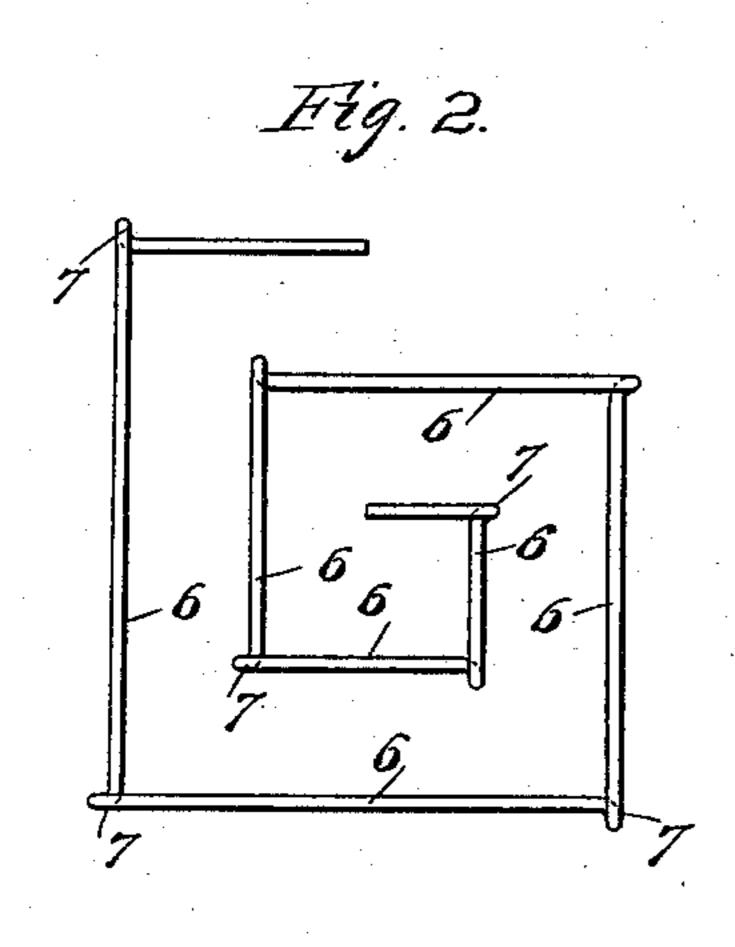
Patented Nov. 21, 1899.

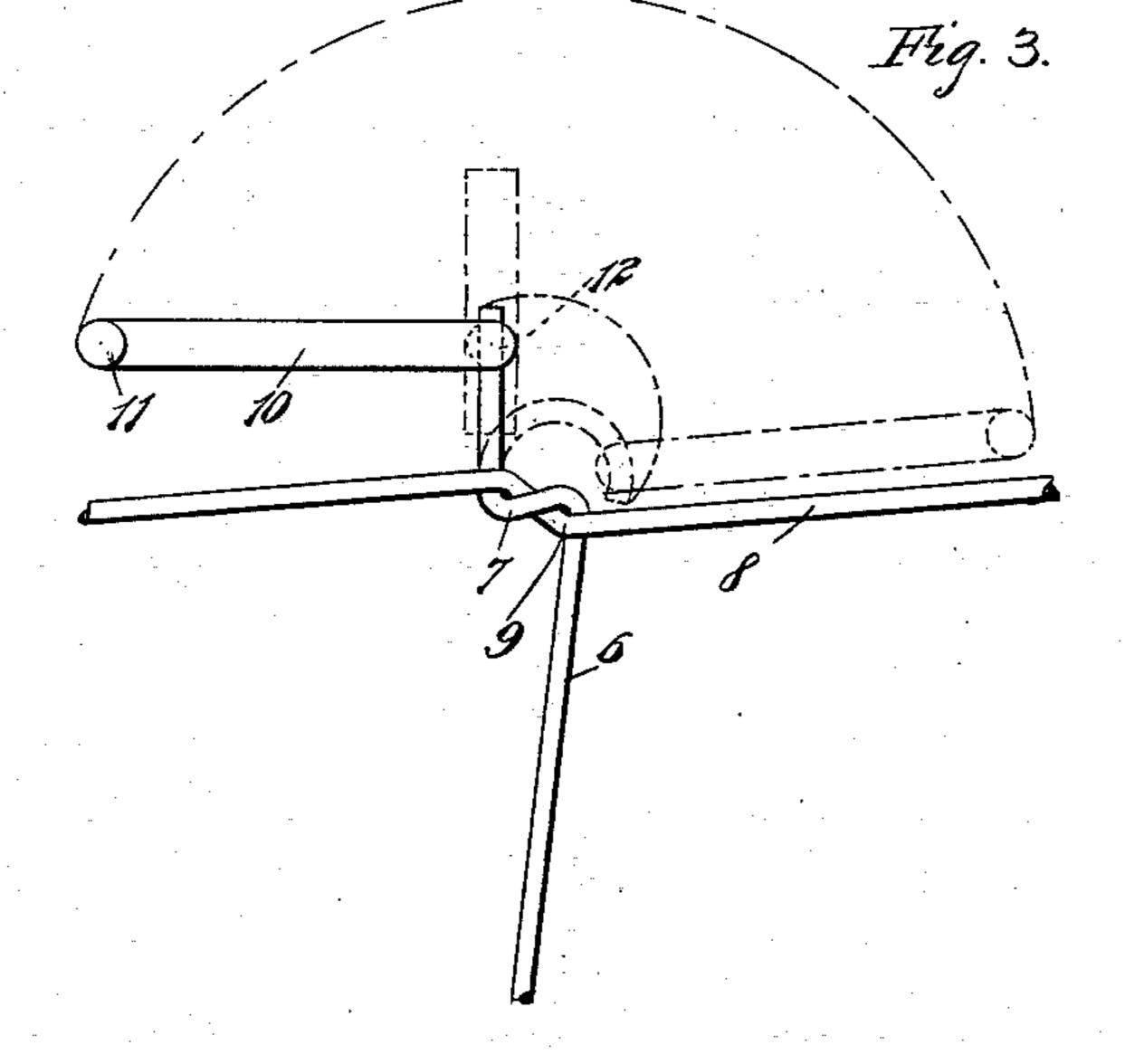
H. MARTIN. WIRE FENCE.

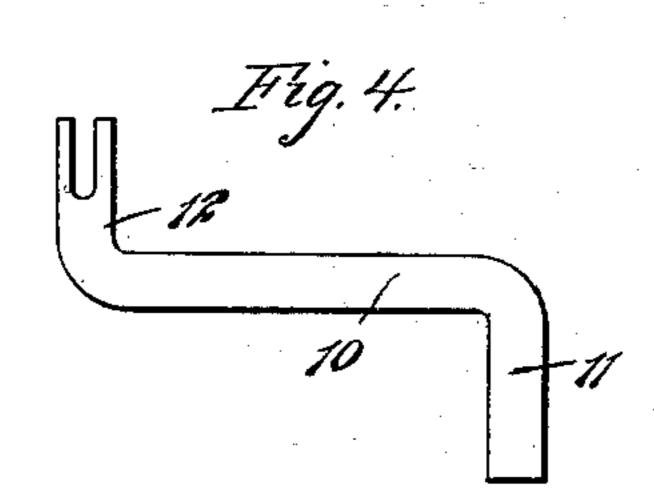
(Application filed Mar. 2, 1899.)

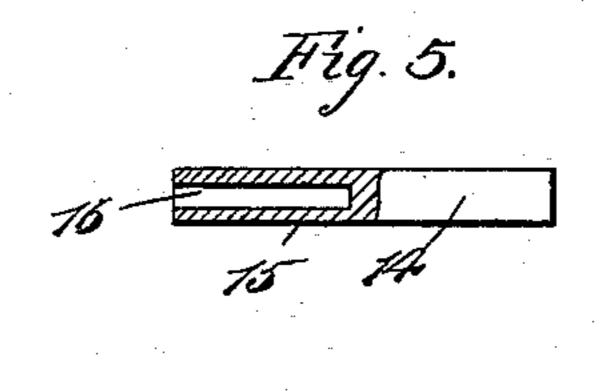
(No Model.)











WITNESSES:

La Shuens

HVENTOR Hartin.

MATTORNEYS

UNITED STATES PATENT OFFICE.

HERMAN MARTIN, OF VERMILION, OHIO, ASSIGNOR TO HIMSELF, AND JOSEPH C. GILCHRIST, OF CLEVELAND, OHIO.

WIRE FENCE.

SPECIFICATION forming part of Letters Patent No. 637,632, dated November 21, 1899.

Application filed March 2, 1899. Serial No. 707,469. (No model.)

To all whom it may concern:

Be it known that I, HERMAN MARTIN, of Vermilion, in the county of Erie and State of Ohio, have invented a new and Improved 5 Wire Fence, of which the following is a full,

clear, and exact description.

The purpose of this invention is to provide a wire fence in which the running-wires will be effectually stayed against each other, thus to prevent the wires from spreading, and this end I attain by means of a stay which is first constructed in the form of an angular volute with a crimp at each angle, and which is applied to the running-wires by bending the 15 crimps of the stay around the respective wires and securing the ends respectively to the top and bottom stays.

This specification is the disclosure of one form of my invention, while the claims de-

20 fine the actual scope thereof.

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

Figure 1 is a side view of a fence having my improvement applied. Fig. 2 is a view of the stay before it is applied to the fence. Fig. 3 is a view illustrating the manner of securing the ends of the stay to the fence. Fig. 4 is a view of the crimping tool employed in securing the stay; and Fig. 5 is a view of a second tool, also used in securing the stay.

As shown in Fig. 2, the stay when first formed is produced of an integral length of pliable wire, bent into a series of successively-shortened runs 6 and having at each bend a kink 7, the form of such kink being best shown in Fig. 3, which gives a fragmentary view of the stay. Each kink comprises two bends forming a straight laterally-extended portion running approximately at right angles to the contiguous runs 6 of the stay and placing the said runs out of plane with each other, so that the kinks may be turned around the several running-wires, and thus cause the stay to assume a position relative to the wires as shown in Fig. 1.

The running-wires 8 of the fence are formed with a number of diagonal bends or kinks 9 gles to the contiguous run therein, which kinks are adapted to engage with the corresponding kinks 7, as best shown in ing-wires of the fence.

in Fig. 3, so that the stays and running-wires are locked together. For the purpose of forming the kinks 9 I provide a crimping-tool, comprising a shank 10 with a handle 11 at one 55 end and a bifurcated stud 12 at the other end, the stud 12 being adapted to engage with the wire to twist the same, and thus produce the kink. The crimping-tool shown in Fig. 4 is also useful, as illustrated in Fig. 3—which is 60 to say, to turn down the short ends of the stays.

When the stay is applied to the fence, the ends of the stay will project as shown with respect to the upper end of the stay in Fig. 3. 65 These ends should now be bent inwardly to assume the form shown in Fig. 1, which is effected by engaging the stud 12 of the crimping-tool with the end of the stay and turning the crimping-tool, as indicated by the dotted 70 lines in Fig. 3. For further handling the stay I provide a bending-tool, (shown in Fig. 5,) which has a handle portion 14 with a body 15, having a longitudinal passage 16 produced therein, which passage is adapted to receive 75 the ends of the stay for the purpose of bending the ends around the adjacent runningwires.

A fence thus constructed is rendered durable and cheap. The stays prevent the run- 80 ning-wires from spreading, and owing to the peculiar form of the crimps it is impossible for the stays to slide on the running-wires.

Having thus described my invention, I claim as new and desire to secure by Letters 85 Patent—

1. A stay for wire fences, the stay being formed of an integral length of wire bent into the form of an angular volute, each angle of the said volute having a kink thereat, which 90 kinks are each produced by two bends, forming a straight laterally-extended portion between them, thus placing the contiguous runs of the stay out of plane with each other.

2. A stay for wire fences, the stay having 95 a number of runs with kinks situated between the runs, such kinks being formed by two bends, producing a straight laterally-extended portion disposed approximately at right angles to the contiguous runs of the stay and benoning capable of being turned around the running wires of the fence.

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3. A fence, having running-wires formed with a number of diagonal kinks therein, and a stay having a number of kinks respectively turned around the kinks of the running-wires, whereby to secure the stays to the running-wires, the kinks of the stays being formed of two bends producing a straight laterally-extending portion disposed approximately at right angles to the contiguous runs of the stay,

whereby when the kinks of the running-wires 10 and stay are interlocked, the stays are prevented from sliding on the wires, and the wires are held from spreading.

HERMAN MARTIN.

Witnesses:

H. R. WILLIAMS, GEO. H. ENGELBERG.