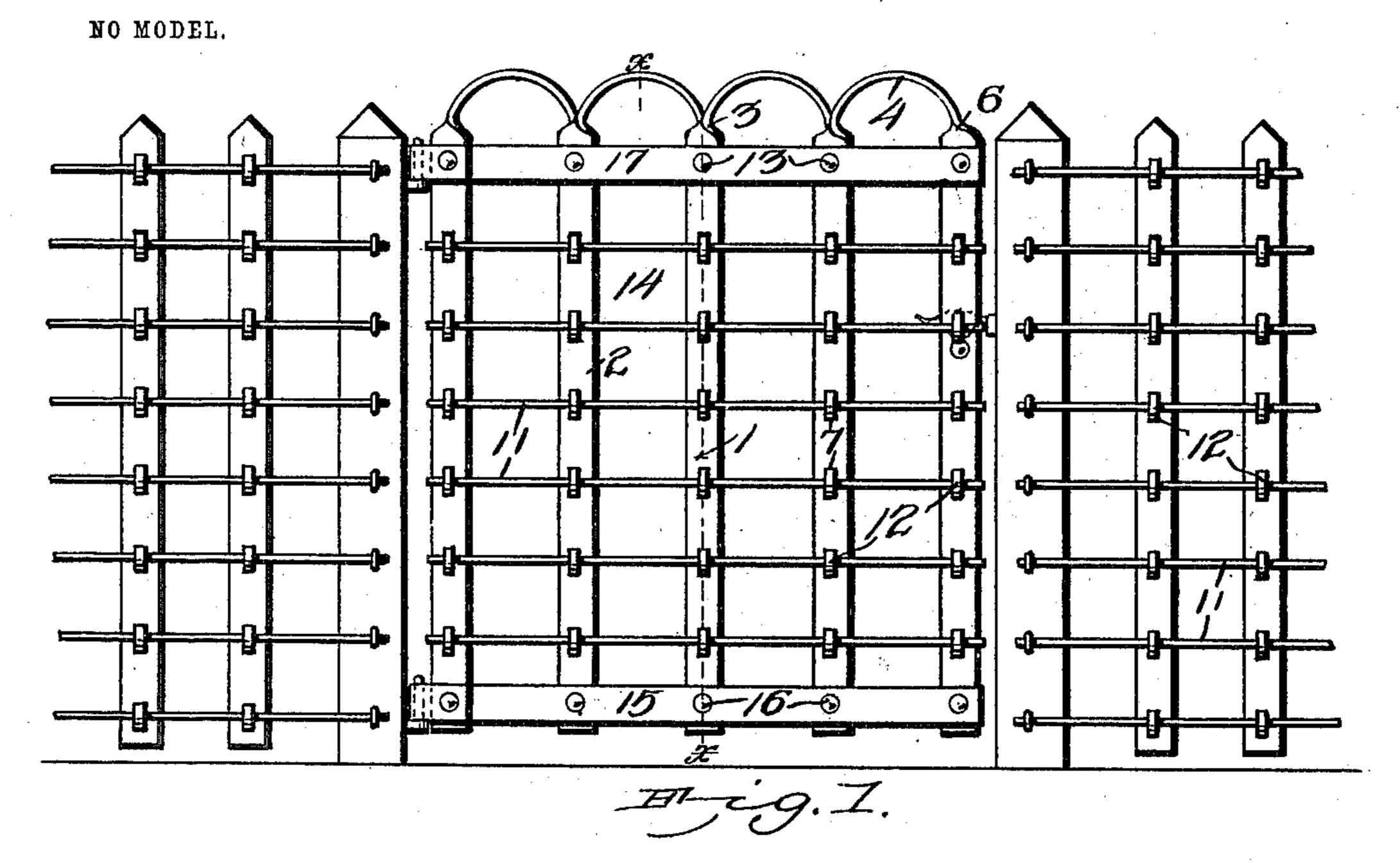
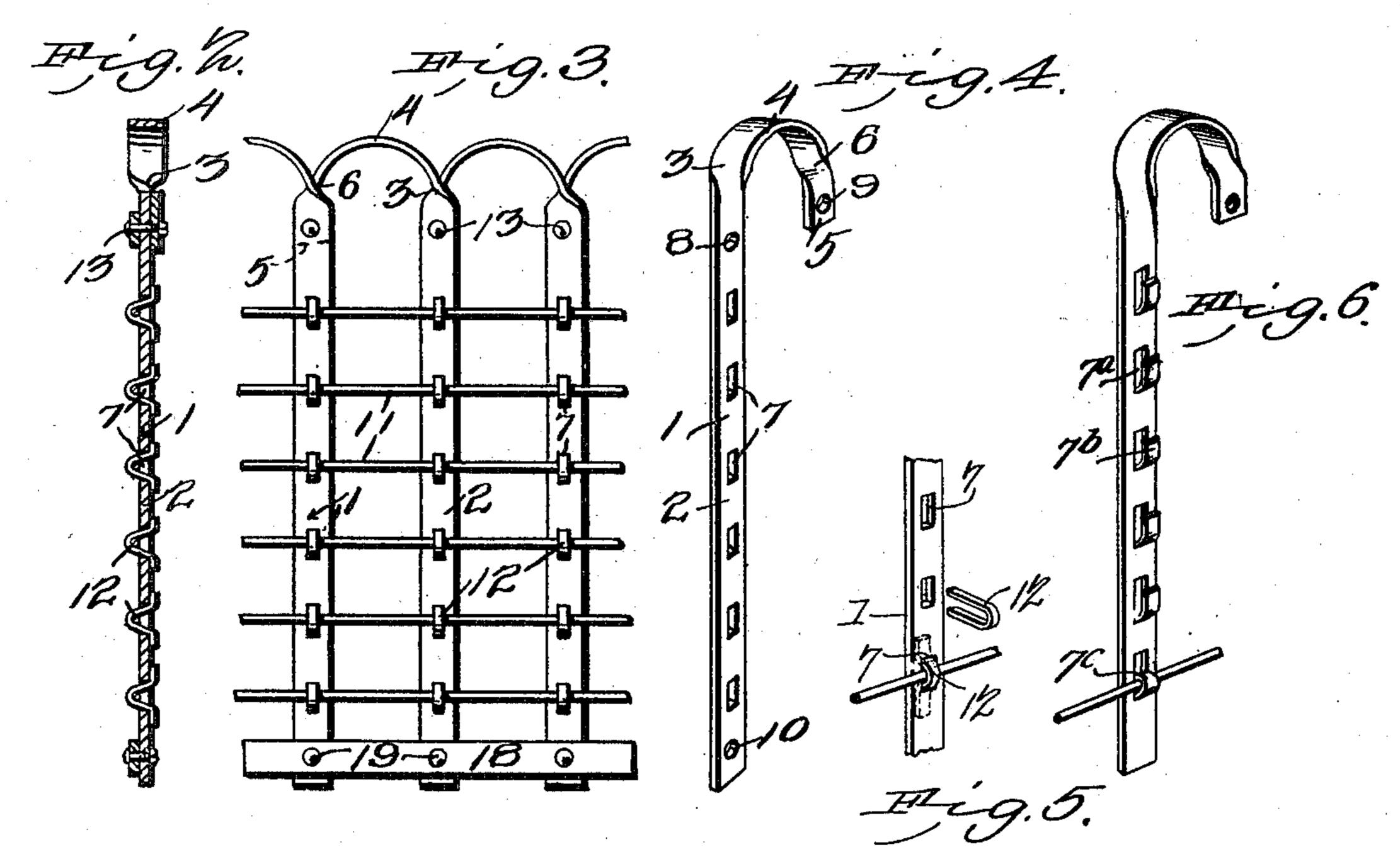
## A. W. KNITTEL. FENCE OR GATE.

APPLICATION FILED JUNE 14, 1902.





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## UNITED STATES PATENT OFFICE.

ANDREW W. KNITTEL, OF NEWCASTLE, PENNSYLVANIA.

## FENCE OR GATE.

SPECIFICATION forming part of Letters Patent No. 719,341, dated January 27, 1903.

Application filed June 14, 1902. Serial No. 111,715. (No model.)

To all whom it may concern:

Be it known that I, Andrew W. Knittel, acitizen of the United States, residing at Newcastle, in the county of Lawrence and State of Pennsylvania, have invented a new and useful Fence or Gate, of which the following is a specification.

This invention relates to fences and gates of that class which are constructed of pickets strung upon or connected by horizontal wires; and it has for its object to provide a picket by means of which, in connection with the necessary wires, a handsome, durable, and ornamental fence or gate may be constructed with little trouble and at a moderate expense.

The invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view of a portion of fence with a gate constructed in accordance with my invention. Fig. 2 is a vertical sectional view taken on the line x x in Fig. 1. Fig. 3 is a side view showing a portion of fence of a more elaborate character, the same being constructed with the pickets, which in Fig. 1 have been employed in the construction of the gate only. Fig. 4 is a perspective view of one of these pickets. Fig. 5 is a perspective detail view illustrating the method of and means for connecting the pickets with the wires which are preferably employed. Fig. 6 is a detail view showing a picket of a modified construction.

Corresponding parts in the several figures are indicated by like characters of reference. My improved fence and gate picket is in all cases preferably made of strap-iron or other suitable metal, the same being in the 40 form of an elongated strap of suitable dimensions. The preferred form of this picket and that which is always employed in the construction of gates is indicated at 1, the body of said picket 2 being formed by a portion of 45 the said strap. At the upper end of the body 2 the strap is twisted by giving it a quarterturn, as shown at 3, thereby turning the upper portion into a plane at right angles to the lower portion. This upper portion (indicated 50 at 4) is bent to form a bow or arch, extending above and to one side of the body 2. The outer lower end of the bow or arch 4 is given a quarter-turn in the same direction as the

turn 3, and the end 5, which projects below said quarter-turn, which latter is indicated 55 at 6, will lie in the same plane as the body 2 of the picket.

The body 2 of the picket is provided with a series of vertical slots 7, by means of which it is connected with the supporting-wires, as 60 will be presently described. At the upper end of the said body 2 is formed a perforation or bolt-hole 8, and a corresponding perforation 9 is formed in the portion 5 at the lower outer end of the arch 4. The body 2 is 65 also provided near its lower end with an additional bolt-hole 10. This structure comprises the preferred form of my improved picket.

In the construction of a fence the wires de- 70 noted by 11 and of which any desired number may be used, the number being of course regulated by the number of slots 7 in the picket, are strung in the usual manner. The pickets are then applied to one side of said 75 wires, and staples (designated by 12 and which are preferably constructed of sheet metal) are adjusted upon the wires with their ends inserted through the slots 7 and afterward turned in opposite directions flat against the 80 pickets, which are thereby securely mounted upon the wires. The material of which the staples 12 are constructed should of course be sufficiently rigid to prevent any danger of accidental displacement.

The pickets are placed adjacent to each other, with the twisted portion 6 of one picket closely contiguous to the twisted portion 3 of the adjacent picket, thus placing the portion 5 of one picket contiguous to the rear side of 90 the upper end of the body 2 of the adjacent picket and with the bolt-holes 8 and 9 in registry with each other. Bolts 13, inserted through the said perforations, serve to bind the pickets securely together. It is obvious 95 that rivets or other well-known fastening means may be substituted for bolts when desired.

In the construction of a gate, which has been indicated at 14 in Fig. 1, any desired 100 number of pickets may be employed, and in this case the pickets employed in such construction are connected at their lower ends by means of a strap 15, sufficiently rigid to space them apart and connected securely with 105 the said pickets by means of bolts or rivets

16, passing through the perforations 10 at the lower ends of the pickets and through corresponding openings in the strap 15. A similar strap 17 may be used at the upper end of the 5 gate, said strap having connection with the fastening means passing through the perforations 8 and 9; but this strap may be dispensed with when desired. I would also state that in the construction of the gate additional 10 transverse or diagonal braces may be employed whenever desired, such braces when used being connected with the means which connect the pickets together; but the use of such additional braces will be regulated by 15 the individual preference of the user of the device.

In the construction of the fence proper pickets may be used which are not provided with the upper portion or arch 4, the pickets 20 in such case consisting simply of straps having slots to receive the staples by means of which they are connected with the fencewires. This construction has been illustrated in Fig. 1. The more elaborate fence construc-25 tion (illustrated in Fig. 3) shows the fencepicket provided with the top arch 4 and with the adjacent twisted parts, and the lower ends of the fence-pickets may in this case be connected by a base-rail 18, connected by pins 30 or bolts 19 with the perforated lower ends of the individual pickets. A fence constructed in this manner while very efficient and durable and presenting an elaborate appearance may be put up at a very moderate expense.

fence-picket, which modification relates especially to the means for connecting it with the supporting-wires, has been illustrated in Fig. 6 of the drawings, by reference to which it will be seen that in the formation of the slots, here indicated by 7°, the material is not removed, but is struck up so as to form a tongue 7°, adapted to engage the supporting-wire and to secure the picket thereon by simply folding or pressing it down upon the wire, as shown at 7°, thus securely fastening the picket thereon.

From the foregoing description, taken in connection with the accompanying drawings, the operation of my invention will be readily understood. My improved pickets may be readily utilized in the construction of either fences or gates, which by the use of the said picket may be constructed at a moderate expenditure of time or labor.

It is obvious that in the construction of gates, as well as of fences where the arched pickets are employed, it will be necessary at one end to use a short picket without the arch to complete the structure. It will further be understood that fence and gate posts of any suitable construction may be used in connection with my invention to support the fence
65 wires for the gates, as the case may be; also, that in connection with the gates hinges and latching devices of any suitable well-known

construction are to be employed. These have been shown in the accompanying drawings, but they do not form a part of my present 70 invention.

Having thus described my invention, I claim and desire to secure by Letters Patent

of the United States—

1. A picket comprising a flat strap, an arch 75 or bow at the upper end thereof located in a plane at right angles to the body-strap by giving it a quarter-twist, and a portion depending from the lower outer end of said arm and located in the same plane as the body-strap by giving it a quarter-twist, said depending portion and the upper end of the body-strap being provided with alining perforations, substantially as set forth.

2. A picket comprising an arch, a short perforated portion and a body-strap depending from the ends of said arch, both in the same plane and that at right angles to the portion of the strap forming the arch, the depending portion and the upper end of the body-strap 90 having alining perforations, and the body-strap being provided with slots to receive fastening means and with a perforation at its lower end, substantially as set forth.

3. In a structure having a plurality of pick- 95 ets, each picket having an arch at its upper end formed with twisted portions at its extremities, in combination with means for connecting the twisted portion depending from the outer free end of the arch with the body 100 of an adjacent picket at the upper end there-

of, and supporting-wires.

4. A structure having a plurality of pickets, each picket having an arch at its upper end formed with twisted portions at its extremities to engage with correspondingly-twisted portions of adjacent pickets, in combination with means for connecting a portion depending from the outer free end of the arch with the body of an adjacent picket at the 110 upper end thereof, supporting wires and means for supporting the pickets upon said wires, substantially as set forth.

5. A structure having a plurality of pickets, each picket having an arch at its upper 115 end formed with twisted portions at its extremities to engage with correspondingly-twisted portions of adjacent pickets, in combination with means for connecting a portion depending from the outer free end of 120 the arch with the body of an adjacent picket at the upper end thereof, supporting-wires, means for supporting the pickets upon said wires, and means for establishing a rigid connection between the lower ends of the pick-125 ets, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

## ANDREW W. KNITTEL.

Witnesses:

T. W. DONALDSON, H. D. STEWART.