

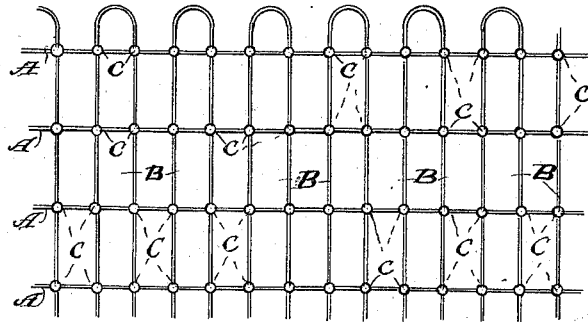
(No Model.)

J. HARRIS.  
FENCE FASTENER.

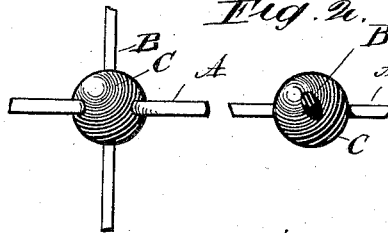
No. 526,311.

Patented Sept. 18, 1894.

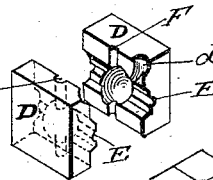
*Fig. 1*



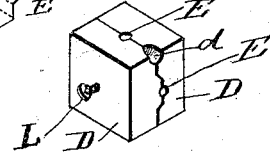
*Fig. 2.*



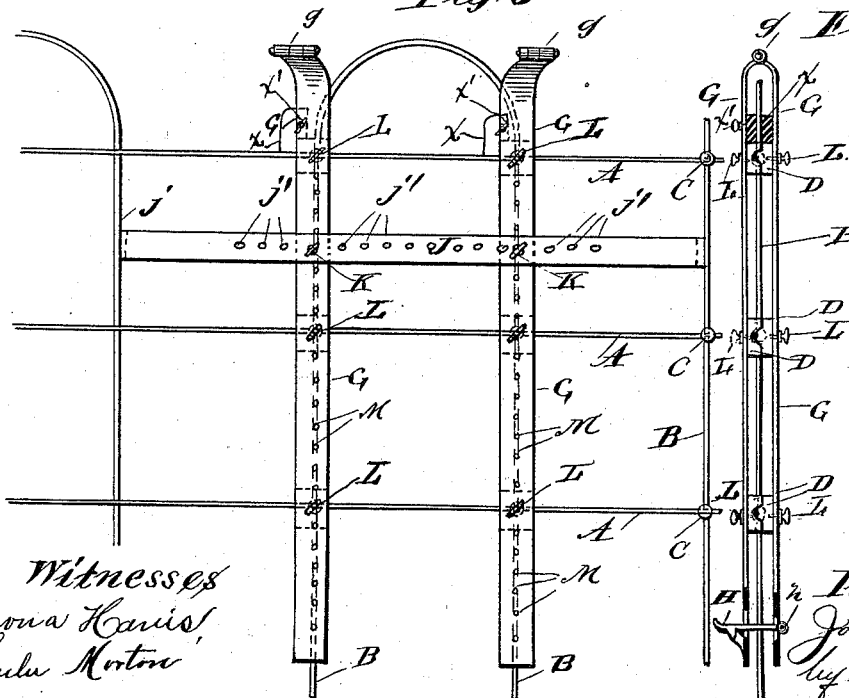
*Fig. 5.*



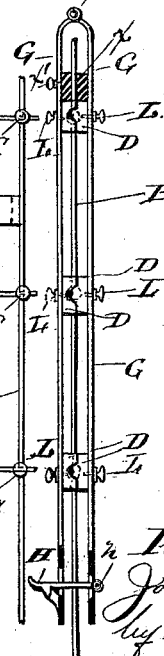
*Fig. 6.*



*Fig. 3.*



*Fig. 4.*



*Witnesses*  
*Leona Harris*  
*Lulu Morton*

*Inventor*  
*Jonathan Harris*  
*By W. M. Warner*  
*Attorney*

# UNITED STATES PATENT OFFICE.

JONATHAN HARRIS, OF CLEVELAND, OHIO.

## FENCE-FASTENER.

SPECIFICATION forming part of Letters Patent No. 526,311, dated September 18, 1894.

Application filed November 18, 1893, Serial No. 491,359. (No model.)

*To all whom it may concern:*

Be it known that I, JONATHAN HARRIS, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Fence-Fasteners, of which I hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in wire fence fasteners, and its objects are to facilitate the methods of fence building and provide a simple, neat and efficient form of fastener which can be quickly applied and will form an indestructible joint for the wires.

My invention consists primarily in the metallic ball joint and in the method of forming and of applying the same to the crossed wires as hereinafter described, shown in the accompanying drawings and more specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is an elevation of a section of fence showing my improved fasteners. Fig. 2 is a full size view of one of the fasteners, in plan and elevation. Fig. 3 is a view in side elevation of a section of fence showing the method of applying molds to the fence. Fig. 4 is an edge view of the molds and the mold frame. Fig. 5 shows an enlarged view of one of the molds the halves being separated. Fig. 6 is a view of a closed mold.

In the figures A A are the horizontal wires.

B, B, are vertical wires.

C, C, are the metallic fasteners molded by heat in a fluid form about the crossing point of a horizontal and vertical wire. As shown these metallic fasteners are globular in form, but the shape could be greatly varied without departing from the spirit of the invention. For instance, regular geometric solids with any number of facets would be equally well adapted to the purpose and any ornamental features or designs could be molded upon one of the facets. It will be seen that the wires just pass each other but do not intersect, and the halves of the molds D are so constructed as to include the crossing wires before the molten metal is poured into the mold at *d*.

E is a depression cut in either half of the mold for the wire A, and F is a similar depression at right angles thereto to receive the wire B.

G, G, are strips or frames to which the halves of the molds are attached, and they are hinged together at the top at *g* so that they may be let down over the upper wire and vertical wire, in such a manner as to bring the respective halves together, and a clamp or latch H hinged to one strip at *h* serves to retain the halves in close engagement.

X is a block which rests upon the upper wire and supports the frames G. X' is a fastening therefor.

When the molds are in position over the wire crossings, the heated metal is poured into the sprue holes *d* and they are quickly filled one after the other. Before, however, the molds can be filled, the strips to which they are attached are gaged to locate the exact position of the wires by means of the horizontal bar J abutting against the next succeeding wire at *j* and the gage strip is provided with perforations *j'* and secured where desired by the set screws K. The molds also are capable of vertical adjustment by means of set screws L and perforations M in the mold strips or frames G.

It will be seen that the mode of operation is extremely simple in building the fence the mold strips being provided with the adjustable gage fixing the position of the vertical wires, and the position of the molds fixing the position of the horizontal wires. When all is in place the globular fasteners are at once cast in position where they permanently remain. It will be readily seen that any one ball could be cast separately if omitted, or at any desirable time or place.

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

The herein described method of building and fastening wire fences, consisting in first, adjusting mold frames provided with a series of molds in half sections over the fence, locating the horizontal adjustment of the vertical wires, inclosing the wire crossings between the mold sections, and filling the molds with liquid metal, substantially as described.

JONATHAN <sup>his</sup> X HARRIS.  
mark

Witnesses:

WM. M. MONROE,  
LEONA HARRIS.