

L. S. LACHMAN.

WIRE FENCE.

APPLICATION FILED AUG. 20, 1908.

917,617.

Patented Apr. 6, 1909.

Fig. 1.

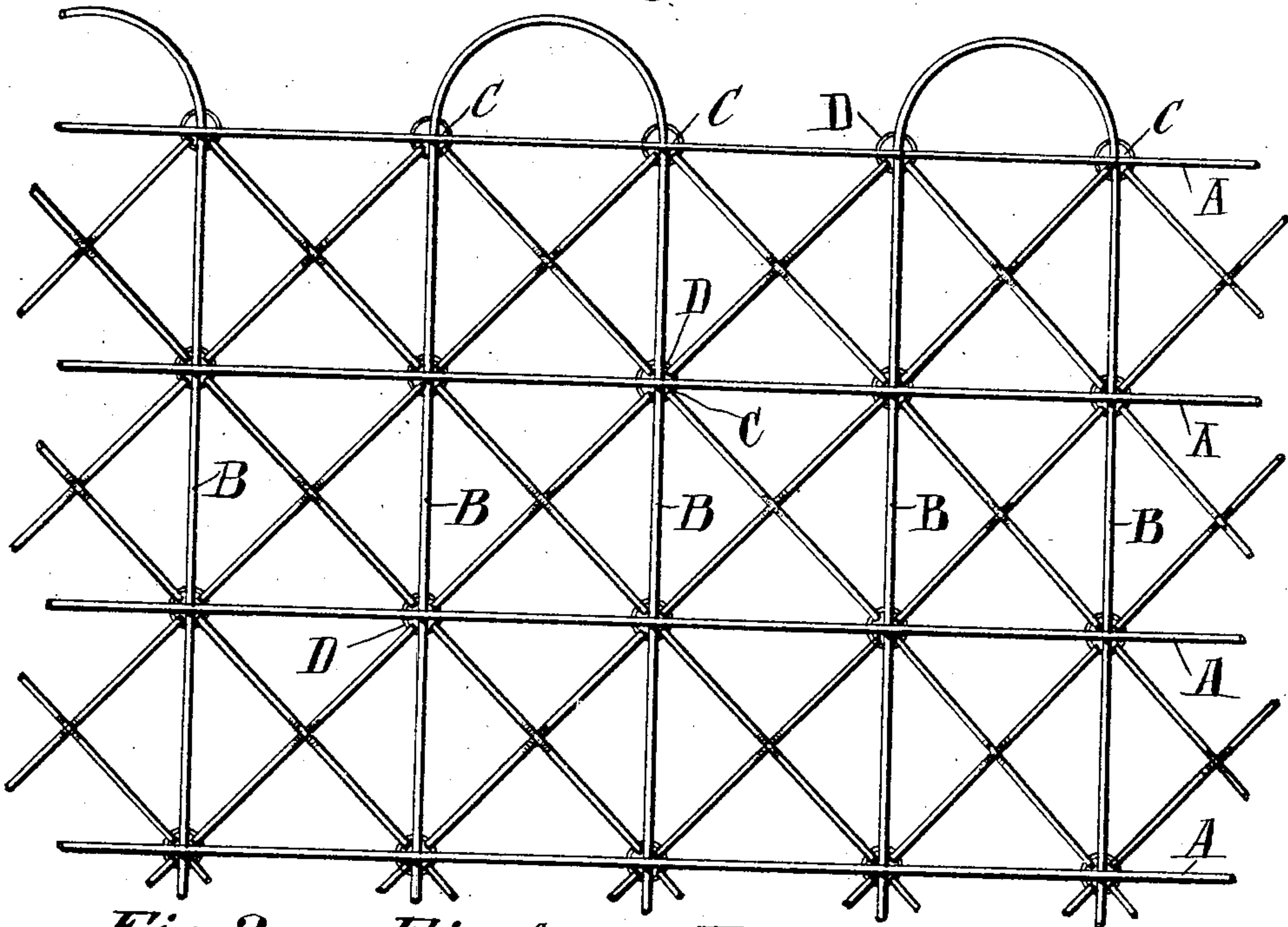


Fig. 2.

Fig. 4.

Fig. 6.

Fig. 8.

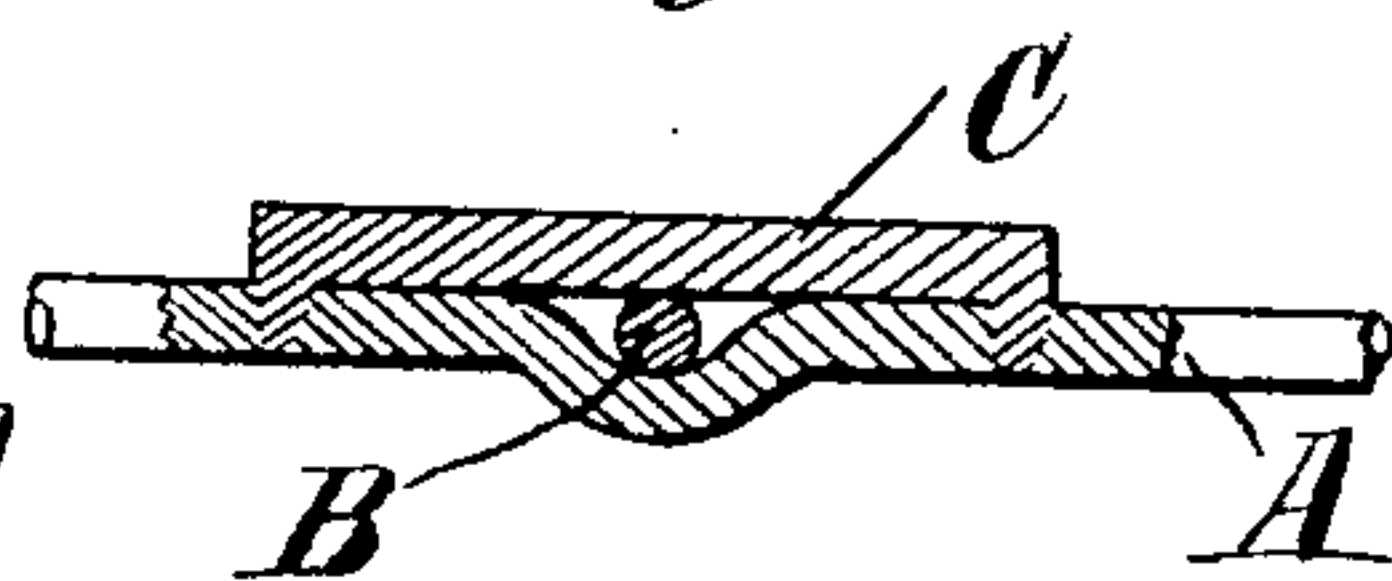
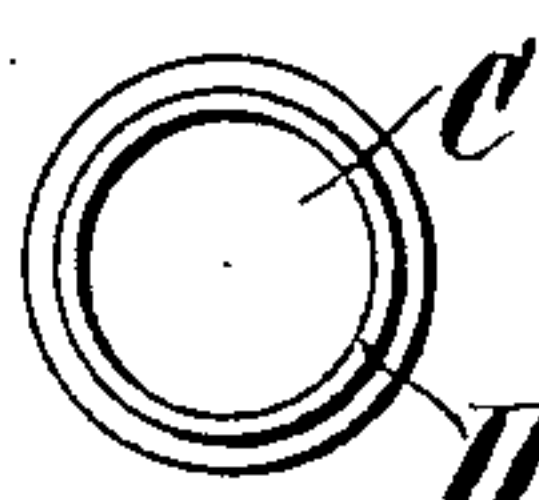
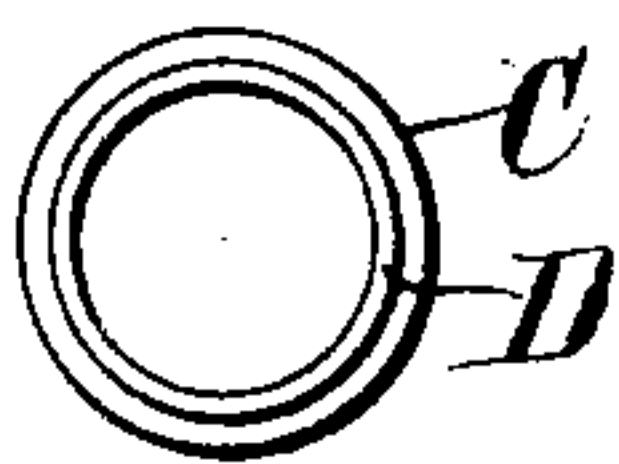


Fig. 3.

Fig. 5.

Fig. 7.

Fig. 9.

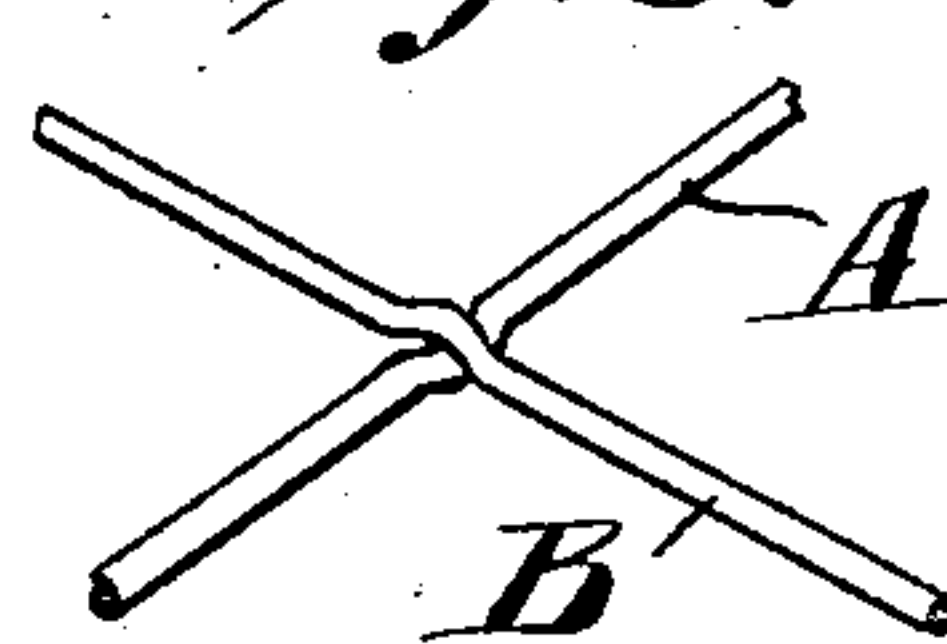
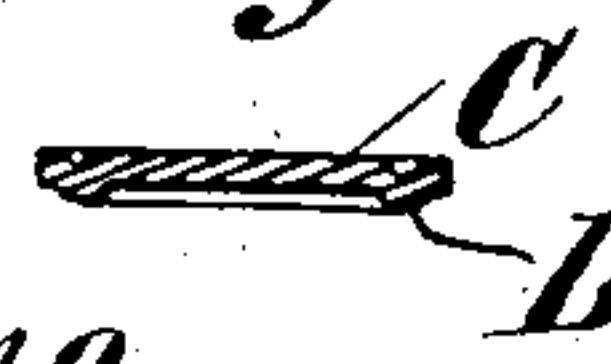
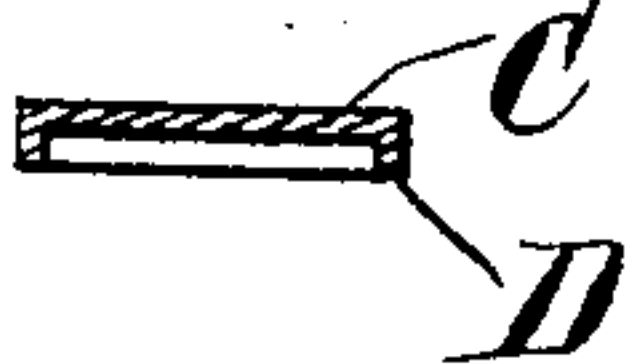
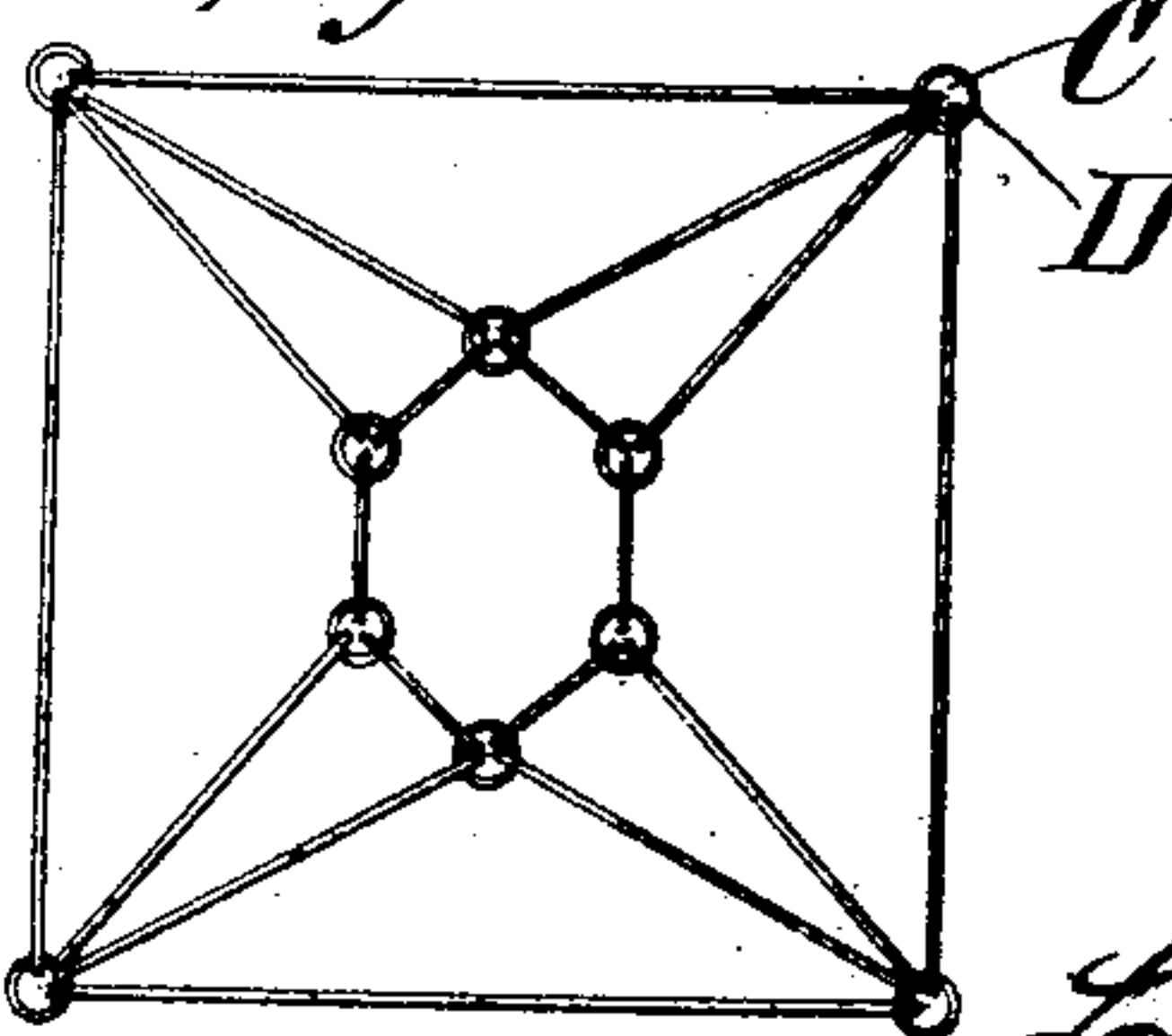


Fig. 10.



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UNITED STATES PATENT OFFICE.

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WIRE FENCE.

No. 917,617.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed August 20, 1908. Serial No. 449,397.

To all whom it may concern:

Be it known that I, LAURENCE S. LACHMAN, a citizen of the United States, and a resident of the city of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Wire Fences, of which the following is a specification.

This invention relates to wire fences wherein the longitudinal line-wires or strand wires are united at intervals to transverse wires forming stays, by means of pieces of metal which are electrically welded to the wires about their intersection.

The objects of the invention are to provide a fence having greater strength and durability than the ordinary wire fence, the wires of which are welded at their intersection.

The objects of the invention are also to provide a form of construction which permits of the fence being made in a great variety of shapes both for ornamentation and strength at a very low cost.

Referring to the drawings: Figure 1 is a rear elevation of a portion of a fence constructed according to my invention. Fig. 2 is a plan view of one of the weld pieces. Fig. 3 is a cross section of Fig. 2. Fig. 4 is a plan view of an alternate form of weld piece. Fig. 5 is a cross section of Fig. 4. Fig. 6 is a plan view of an alternate form of weld piece. Fig. 7 is a cross section of Fig. 6. Fig. 8 is an end view partly in cross section and with parts broken away of Fig. 1. Fig. 9 is a detail perspective view showing the intersection of the wires. Fig. 10 is a detail of an alternate construction.

In the drawings, A designates the strand wires of the fence and B designates the stay wires which are arranged to cross the strand wires at any desired angle, the wires being securely held together at their intersections by means of buttons or small pieces of sheet metal C, which in the present instance are provided with at least one ridge D which projects above the surface of the adjacent metal of the button and corresponds approximately in cross-sectional area to that of the wires, so that when an electric welding current is passed through the ridge D and the wires A and B and the same are forced together, in any desired manner, the metal at the points of contact both on the wires and the ridge D will be heated to the welding temperature

after which the same are forced together until the metal of the button C and the portion of the wires adjacent to the points of welded union meet and contact so as to short-circuit the welding current by affording a larger path for its passage, the metal of the wires being welded to ridge D at each intersection of the wires as shown in Fig. 8.

The buttons C are usually constructed of sheet metal suitably pressed to form the ridge D although the ridge D may be made in any other desired manner, it being immaterial whether the ridge D is forced up out of the metal as shown in Figs. 6 and 7 or whether the same is simply pressed as shown in Figs. 2, 3, 4 and 5.

If desired the buttons may be provided with a plurality of concentric ridges, provided the buttons are made large enough to space the different ridges far enough apart so as to facilitate the welding current being short circuited when the button is pressed in contact with the wires, and also to facilitate the ridges being brought to the proper welding temperature.

It is obvious that the buttons may be made any desired shape so as to harmonize with the general design of the fence and it is also obvious that the ridges are not necessarily made continuous and can just as well be provided only where the wires are to be welded thereto, the remaining portions of the ridges being of no advantage in welding the parts together but of considerable advantage as the same is easier to put in place and cheaper to manufacture.

The buttons C also permit of the cross stay wires E being welded to the same, so as to increase the strength of the fence and change the design in a great variety of ways such as that shown in Fig. 10.

As shown in Fig. 1 the cross stay wires E are made in short lengths but the same may be made in one piece so as to reach from the top strand to the bottom strand wire of the fence.

When the wires are made to cross each other such as the wires A and B, the same are preferably bent or kinked at their intersection as shown in Fig. 8 so as to give a more finished appearance to the fence and facilitate the ridge D coming in contact with the wires where it crosses them.

The button C as before described, permits of the wires A and B being welded at

four different places at each intersection, thereby obviating all chances of the wires ever coming apart. The button also has the additional advantage of permitting cross
5 wires to be welded to the same so as to increase the strength utility and beauty of the fence.

While the invention has been described with particular reference to the details of
10 construction it is not to be considered as limited thereto, as many changes may be made and still fall within the scope of the appended claims.

What I claim is:—

15 1. A wire fence comprising a series of strand wires and a series of stay wires, and a ridged button, said strand and stay wires

being weld-united to the ridges of said button.

2. A wire fence comprising a series of 20 strand wires and a series of stay wires, a ridged button, the ridges of said button being approximately of the same cross-sectional area as the strand and stay wires to which the ridges of said button are weld-united at 25 the intersection of said strand and stay wires.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

LAURENCE S. LACHMAN.

Witnesses:

LEO J. MATTY,

FRANK E. RAFFMAN.