

J. Lancelotti,

Making Ornamental Chains,

N^o 23,303.

Patented Mar. 22, 1859.

Fig. 2.

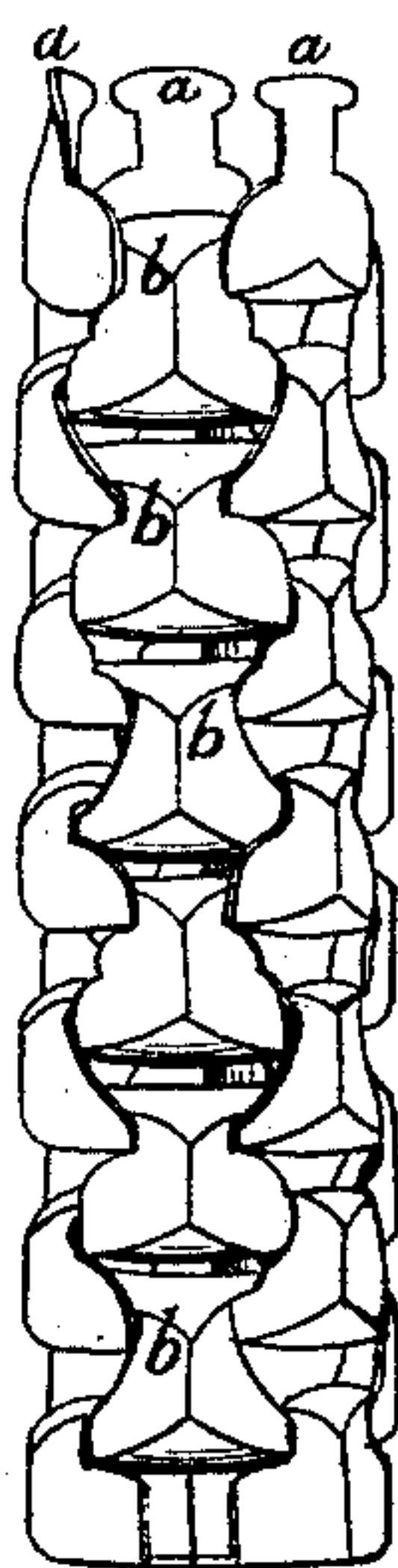


Fig. 1.

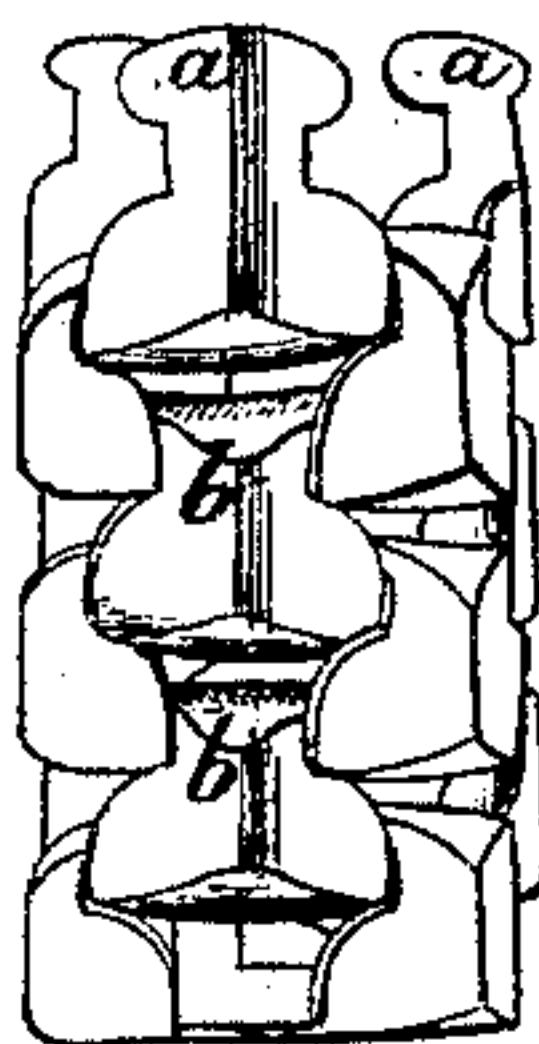


Fig. 3.

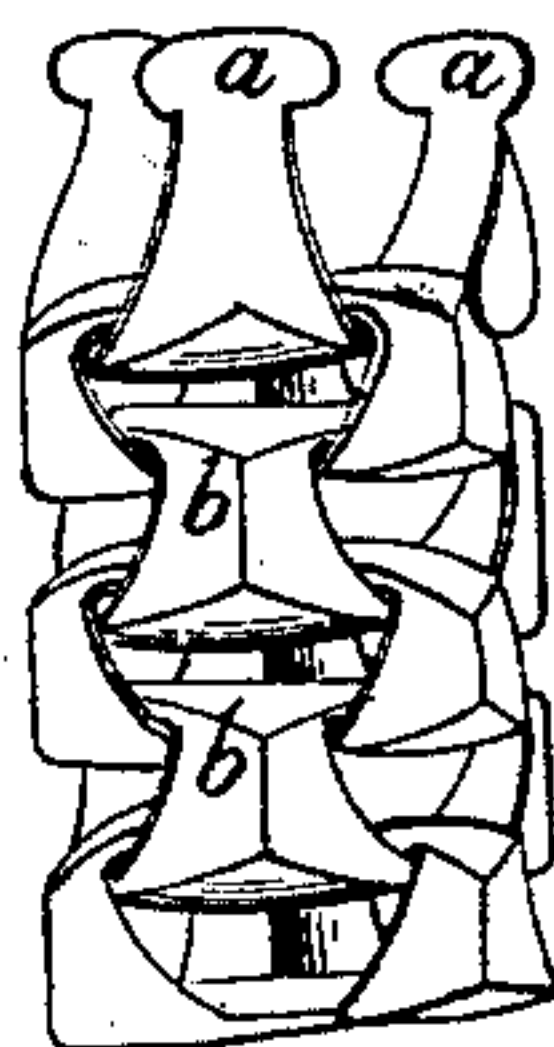


Fig. 4.

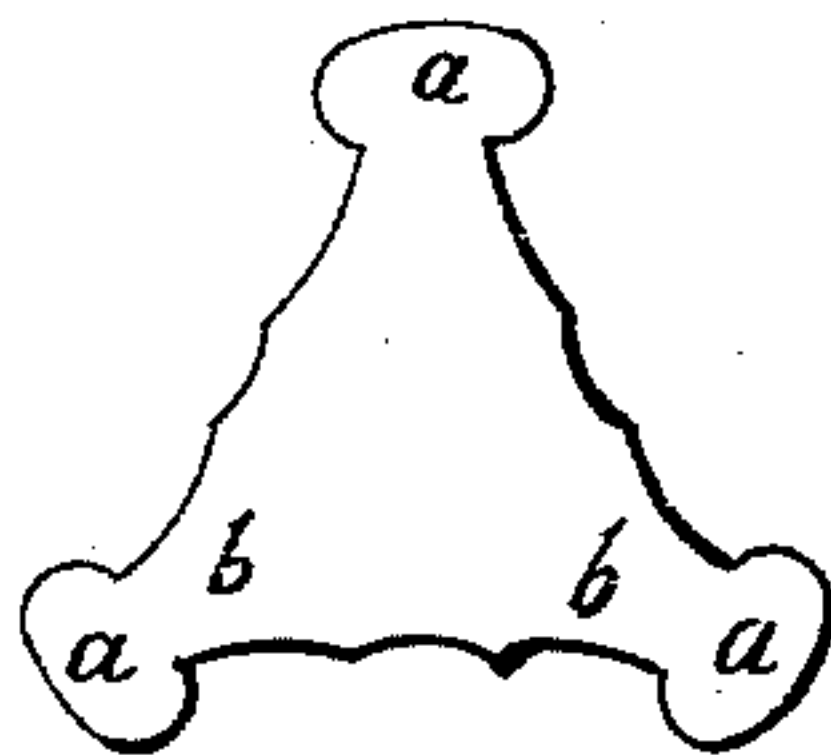
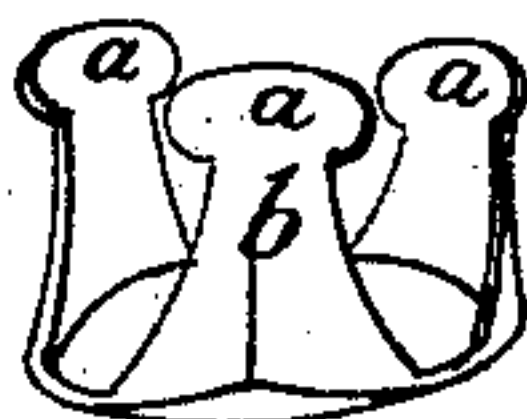


Fig. 5.



Witnesses.

*Wm. H. Green,
John Gartland.*

Inventor.

James Lancelotti.

UNITED STATES PATENT OFFICE.

JAMES LANCELOTT, OF CRANSTON, RHODE ISLAND.

MAKING ORNAMENTAL CHAINS.

Specification forming part of Letters Patent No. 23,303, dated March 22, 1859; Reissued January 16, 1866, No. 2,147.

To all whom it may concern:

Be it known that I, JAMES LANCELOTT, of Cranston, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in the Method of Making Ornamental Chain from Sheet Metal; and I do hereby declare that the following specification, taken in connection with the drawings making a part of the same, is a full, clear, and exact description thereof.

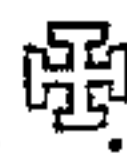
Figures 1, 2, and 3 represent three several patterns of chain differing only in the form of the device into which that part of the arms of each link which make up the sides of the chain is cut; the manner in which the links are woven together is the same in all. Fig. 4 is a blank link of the pattern used in making the chain shown in Fig. 3. Fig. 5 is the same link after it has been subjected to the first operation.

A large specimen of one variety of my chain for the purpose of showing more clearly in what my improvement consists and a specimen of chain as it appears when finished accompany the original papers on file in the Patent Office.

The "Adelaide" chain as it is called in the trade, or that variety of sheet metal chain which is made by the machine heretofore patented by Lauriston Towne, of Providence, R. I., is woven by bending the two opposite arms of each link over the center of the body of the next succeeding link so that the second pair of arms shall overlap the pair first bent down. In case the link has an odd number of arms then the arms are bent down over the center singly in succession.

In that variety of chain which is represented in the drawings attached to the Letters Patent heretofore granted to me on the fourth day of May, 1858, the chain is formed by simply bending the arms of each link at a very acute angle against the sides of the dome or cup into which the body of the next succeeding link is formed.

It is obvious that in the first description of chain but little variety in the appearance can be introduced owing to the necessity of having the shank of the arms which governs the character of the chain formed with its two sides parallel to each other, or nearly

so,—thus ; while in the second description of chain, although a great variety of patterns can be introduced in consequence of the chain's deriving its character principally from the conformation of the edge of the dome or cup, yet it is objectionable on account of its great deficiency in strength unless a finer quality of stock is used in the manufacture than is for any other purpose required or than is profitable.

To make a description of plate chain that should not only admit of a great variety of ornamental patterns but also when made of the ordinary qualities of stock be of sufficient strength to meet all reasonable requirements has been the object of my invention.

I take a blank of sheet metal having three arms, on the extremity of which arms is formed a cross bar, *a*, having its corners rounded as shown. So much of each arm as will when bent up compose one side of the chain is cut into the ornamental form which is to distinguish the chain, care being taken that the base shall be wider than the top. I then take a die and former, the face of which is a geometrical figure having twice the number of sides that the link has arms and strike up the link in such a manner that one of the outer angles of the forming punch shall indent a point midway between the sides of each arm. The link is thus made to assume the form shown in Fig. 5, each of the arms being bent transversely at right angles, or nearly so, with the base, and each, also from the form of the die being bent longitudinally at the angle due to the geometrical figure into which the base is formed. A second link is then prepared in the same manner and placed with its arms between the arms of the first. The extremity of each arm of the first link is then bent over (at point *b*) toward the center of the chain in a direction parallel with the base. It will be observed that the ears of the cross bar, *a* take a full bearing against the sides of the angle of two of the arms of the next succeeding link so that when the arms of the next succeeding link are bent down in the same manner, the first link is held in its place and cannot be drawn out without tearing away the metal. By repeating this process I am enabled to make a chain which is capable of sustaining a strain equal to the

cohesive strength of the metallic arms of each link, at the same time that it admits of a great variety of ornamental patterns.

I have spoken of the use of links having three arms, and the drawings exhibit varieties of chain formed of links having that number of arms only, but the same principle can be employed in the use of links having a greater number of arms though I do not think with any advantage either in point of strength or beauty.

I claim—

The method described of weaving a chain from sheet metal by forming the base of

each link into a geometrical figure and by bending each arm longitudinally at the same angle as one of the outer angles of the base so that a cross bar on the extremity of the next preceding link, shall when bent down bear against the angular side of two of the arms of the next succeeding link and thereby enable the chain to withstand a strain nearly equal to the cohesive strength of the metal of which the links are formed.

JAMES LANCELOTT.

Witnesses:

WM. H. GREENE,
JOHN GARTLAND.

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