E. NORTEMANN.

ORNAMENTAL CHAIN-LINKS.

No. 193,543. Patented July 24, 1877.

Fig. 1.

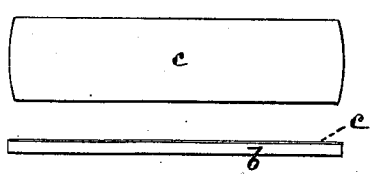
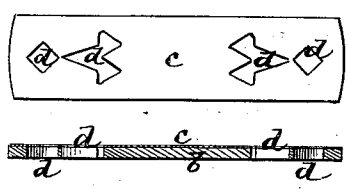


Fig. 2.



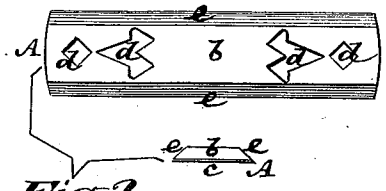


Fig. 3.

Fig. 4.

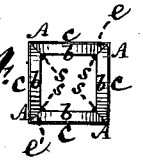


Fig. 5.

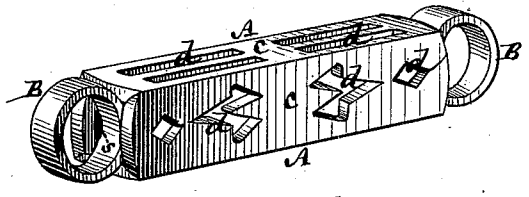
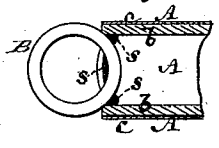


Fig. 6.



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ERNST NORTEMANN, OF ATTLEBOROUGH FALLS, MASSACHUSETTS, ASSIGNOR TO R. F. SIMMONS & CO., OF SAME PLACE.

IMPROVEMENT IN ORNAMENTAL CHAIN-LINKS.

Specification forming part of Letters Patent No. **193,543**, dated July 24, 1877; application filed May 25, 1877.

To all whom it may concern:

Be it known that I, ERNST NORTEMANN, of Attleborough Falls, in the county of Bristol, and State of Massachusetts, have invented a new and useful Improvement in Ornamental Chain-Links, of which the following is a description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to the manufacture of box-links for jewelers' or ornamental-plated chains.

The object of the invention, as applied to gold or silver plated ornamental chains, such as "vest" and other chains to be worn on or about the person, is to produce a plated chain having certain of its links of a box-like or tubular construction, and with ornamental perforations in its sides, thus giving lightness, as well as beauty, to the chain, which, moreover, is made capable of taking a fine finish.

The invention consists in a box-link having three or more ornamentally-perforated sides, each of which latter is made of a separate piece of plated metal, beveled at its edges, so that when the several sides are put together they form a miter-joint, and are united by soldering from the inside of the link, the plated surface being on the exterior of the latter. By this construction of a box-link the plated surface of said link is kept intact at the edges, corners, or angles of its sides, and said edges are brought up sharp with the plated surface wholly on the exterior of the link and without any exposure of the inside solder, by which the sides are united. End rings are also combined with the box-link to connect said link with other links, and these rings are secured by soldering them within the open ends of the box-link, whereby the junction of the independent sides of the link is further secured.

Figure 1 represents face and longitudinal edge views of a blank from which one of the sides of a box-link constructed in accordance with the invention is made. Fig. 2 represents similar views of said blank after it has been ornamentally perforated. Fig. 3 is an inside face view and end view of said blank after its edges have been beveled to form a miter-joint. Fig. 4 is an end view of the link before the rings, by which it is connected with other links, are inserted in its ends; and Fig. 5 a view, in perspective, of the box-link complete. Fig. 6 is a partial longitudinal section of one end of the link.

To make my improved link I take brass stock in the form of a plate, which is coated or plated with gold or silver on its one side or surface by rolling, and, after cutting said plate into suitable strips, next cut out or from said strips a series of blanks similar to the blank shown in Fig. 1, in which *b* represents the brass stock, and *c* the gold or silver plating. This blank has then perforations *d* of any desired size and form made in it, as shown in Fig. 2, to contribute to the lightness and beauty of the link, after which it is flattened between smooth dies. Such ornamentally-perforated blank I then expose to the action of two revolving burrs or cutters to bevel the edges of the blank from its inner or stock side, thereby producing a link side, A, Fig. 3, having bevel or miter edges *e*. The necessary number of such sides A to form a link having been thus produced, said sides are placed and temporarily bound with the mitered edges together, and the same united, by solder, at said edges from the inside of the link, as shown at *s* in Fig. 4. By thus constructing the box-link, the plating on the outside is brought up as sharp on the edges or angles of the link as if the link were made wholly of gold or silver, and the plated surface is preserved intact on the angles, corners, or edges of the link, which takes a fine finish. Neither is any gold or silver wasted, as all the plating is on the outside of the link, and the solder is effectually secured from view. Furthermore, the ornamental perforations being readily made in the blanks from which the sides of the links are produced, a highly ornamental and light hollow or box link is easily and cheaply produced. It is not necessary that all the sides of the link should have similar ornamental perforations in them.

The solder *s*, applied to the sides of the link from the interior of the latter, serves generally and effectually to hold said sides together without any compress fillet or other means; but the rings B, which are inserted and soldered

within the open ends of the link to provide for the attachment of other links, as represented in Fig. 6, further contribute to hold the several or certain sides of the link together.

I claim—

1. The combination, in a box-chain link, of the independent perforated and externally-plated sides A, having mitered edges, and soldered together at said edges on or from the inside of the link, substantially as specified.

2. The combination of the perforated sides A, having plated exterior surfaces and mitered joints at their edges, united internally by solder *s*, and the end rings B entered and soldered within the open ends of the box-link formed by the sides A, essentially as described.

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