## J. P. CARPENTER. Ornamental Chain.

No. 218,485.

Patented Aug. 12, 1879.

Fig.1.

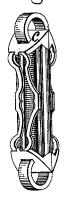


Fig. 2.

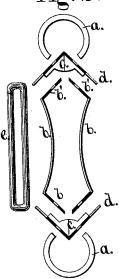


Fig. 4.

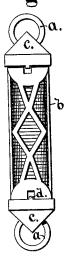
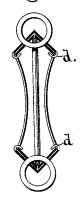


Fig. 3.



WITNESSES:

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## UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN ORNAMENTAL CHAINS.

Specification forming part of Letters Patent No. 218,485, dated August 12, 1879; application filed March 5, 1879.

To all whom it may concern:

Be it known that I, JOTHAM P. CARPENTER, of Attleborough, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Ornamental Chains; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a perspective view of one of my improved ornamental chain-links. Fig. 2 is a sectional view of the several parts forming an ornamental chain-link, placed sufficiently apart to more clearly show their construction. Fig. 3 is a sectional view of one of my ornamental chain-links with the several parts secured together. Fig. 4 is a view of an ornamental chain-link with four straight sides and a central ornament, constructed in the same manner as the other links.

The object of this invention is to make ornamental chains out of links the parts of which are secured together without solder, so as to avoid the labor and expense in soldering and removing the surplus solder, and also in recoloring and polishing the portion injured by the heat in soldering.

The invention consists in the peculiar arrangement and construction of the link, as will be more fully set forth hereinafter, and pointed out in the claims.

In the drawings, a are the end rings of an ornamental chain-link. b b are the two sides of the link, usually made of stamped openwork metal of any desired form or ornamentation. b' is a extension of the side b, made of such shape that two or more sides when placed together will rest one against the other, so that when held by a clamp they will retain their assigned position. When two of these sides are used, as shown in Figs. 1, 2, and 3, the portion b' may be beyeled, as shown, so that the two sides form a cone at each end, or they may be bent at a sharp angle, so that the end of the link is square.

If three or more sides b are used the extension b' is made so that the desired number

will fit together at the ends, and the whole will be firmly braced.

c is a metal cap, made of such form as will embrace two or more of the sides b and firmly hold them together. This cap c is provided with clamps d, which are bent over the ends of the sides b, or made to enter some opening in or near the ends, so that by bending the clamps d, as shown in Fig. 3, the caps are firmly secured to the sides, and the whole firmly held together.

The rings a  $\dot{a}$  may now be inserted and closed, and will more firmly secure the sides together, as when two side frames, b b, are used the rings pass through both and through the caps c.

Any ornamental center desired may be placed between the sides, as shown in Figs. 1 and 4, and will be retained by the projection on the cap c, extending along the sides.

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e is a wire loop, which may be placed inside the link so that the rings a will pass through the end of the same, and all the strain on the rings will be transferred to the loop e, so that the sides may be of any desired curved line, and not be liable to straighten out when strain is exerted on the chain.

By this improvement in the construction of ornamental chain-links, all the parts may be made of drawn or rolled stock-plate, in which a film of fine metal forms the surface of the inferior plate, they may be stamped and polished in all their parts, and each part separately. They can be secured together by bending the clamps d under the metal of the sides b with tweezers, and without heat or solder, by persons not skilled in the manufacture of jewelry.

All parts will retain their color, polish, and the hardness imparted to them in stamping, producing an ornamental chain of superior finish, strength, and durability at less cost than ornamental chains as heretofore constructed.

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

1. An ornamental chain-link consisting of

the perforated end caps, c c, provided with clamps d and ring a, the latter being inserted through the perforations in the cap, while the sides and cap are secured by bending the clamps d around under the sides, substantially as set forth.
2. The combination, with the sides b b, caps

the sides b b, two or more, in combination with |c| c, and rings a a, of the loop e, arranged to the perforated end caps, c c, provided with secure the rings together and release the curved sides from strain, substantially as and for the purpose set forth.

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Witnesses:

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