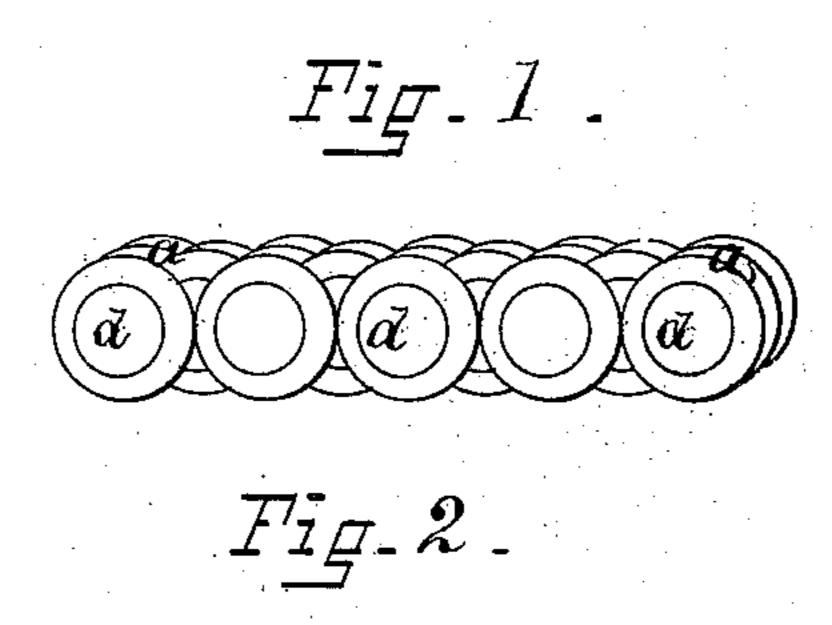
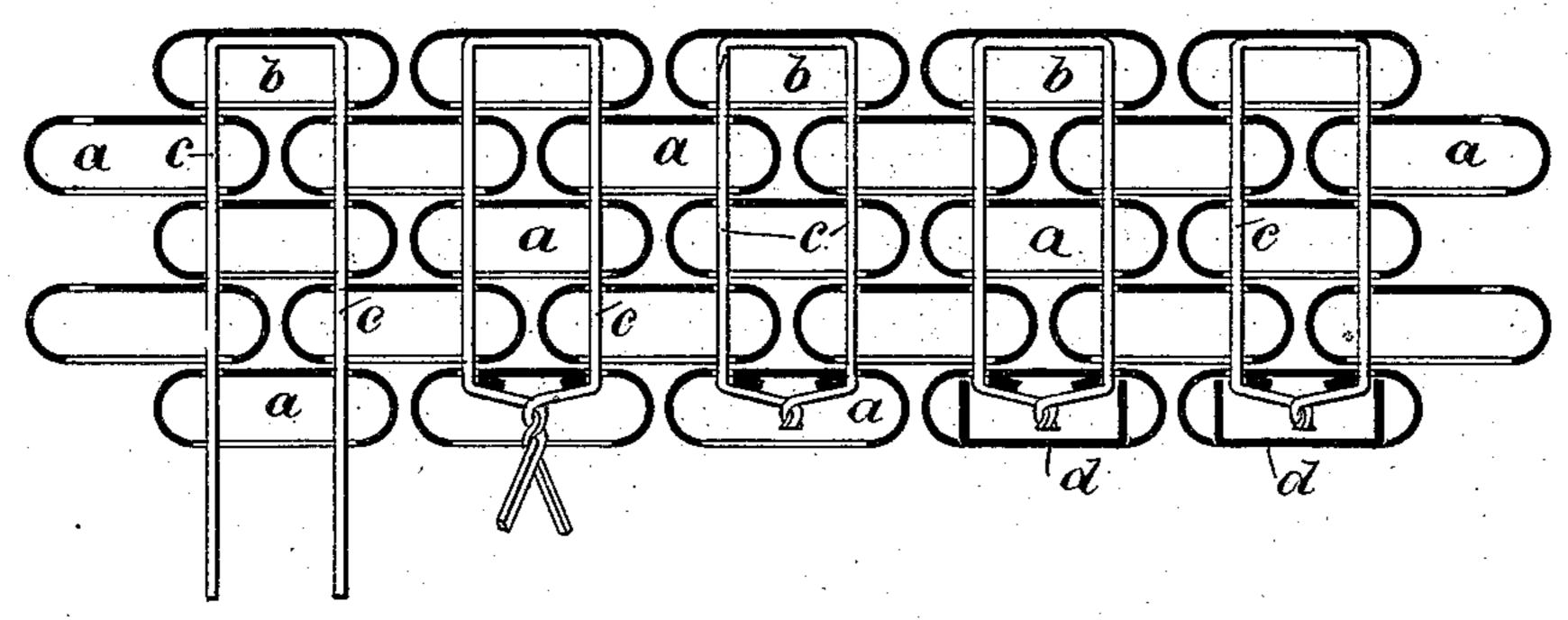
(No Model.)

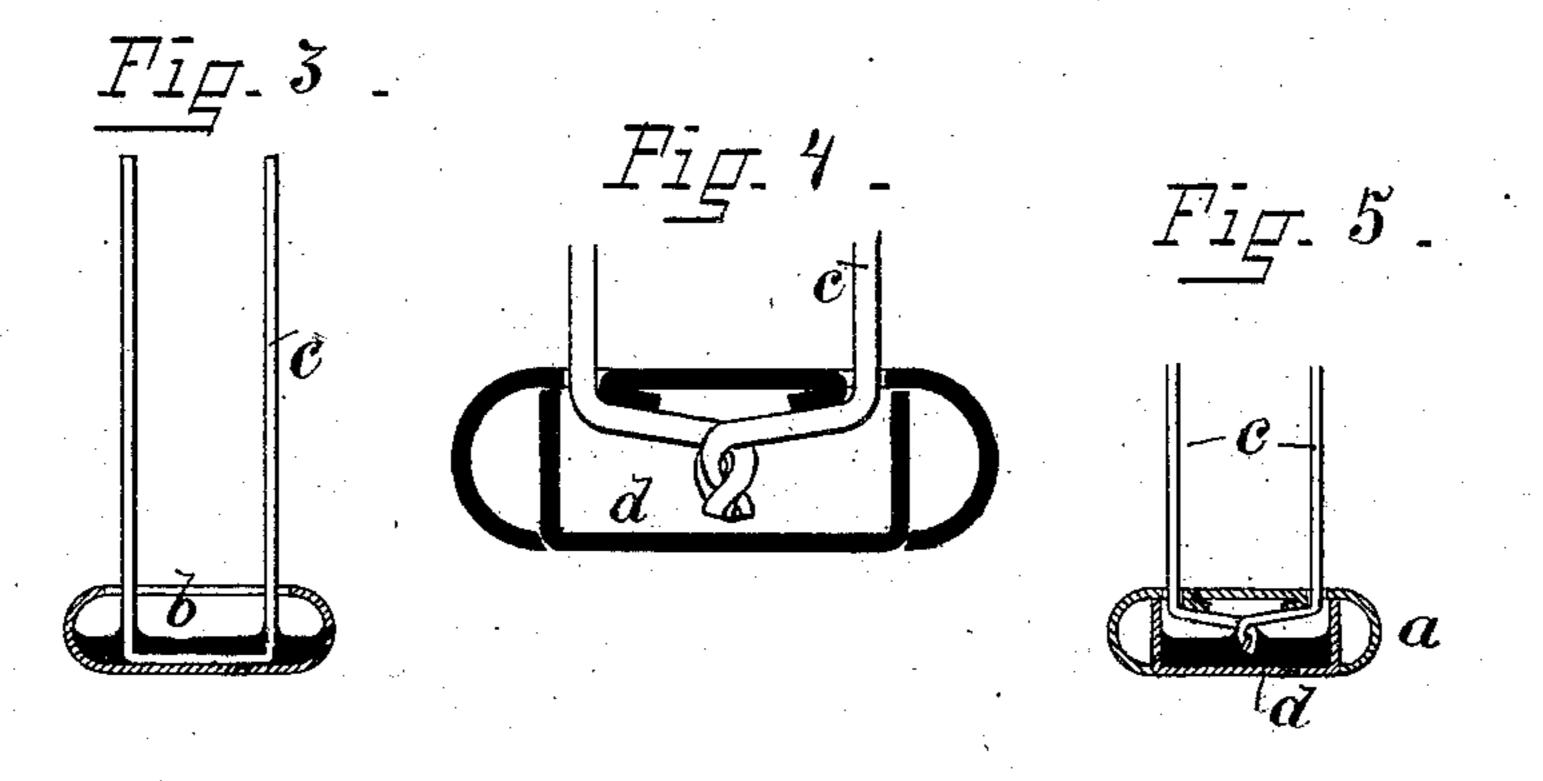
H. A. CHURCH. ORNAMENTAL CHAIN.

No. 294,580.

Patented Mar. 4, 1884.







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United States Patent Office.

HENRY A. CHURCH, OF PROVIDENCE, RHODE ISLAND.

ORNAMENTAL CHAIN.

SPECIFICATION forming part of Letters Patent No. 294,580, dated March 4, 1884.

Application filed March 13, 1882. (No model.)

To all whom it may concern:

Be it known that I, Henry A. Church, of the city and county of Providence, and State of Rhode Island, 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.

This invention has reference to an improvement in the class of ornamental chains known in the art as "roller-chains," or chains made up of a large number of rings strung together side by side and overlapping lengthwise until a chain of the desired width and length is secured.

The invention consists in the peculiar and novel construction by which the connecting-wires are protected and a more elegant and finished appearance is imparted to the chain.

Figure 1 is a perspective view of part of a chain constructed after my invention. Fig. 2 is a sectional view of the chain, showing the connecting-wires in the different conditions incident to the construction of the chain. Fig. 3 is a sectional view of one of the side units, showing a staple secured at the closed end by solder. Fig. 4 is a sectional view of one of the side units, in which the two ends of the staple are secured together, closed with a cap. Fig. 5 is a sectional view of one of the side units, showing the cap closing the opening secured by solder.

In the drawings, a a are units or rings. As described in my application filed November 13, 1882, these units or rings are drawn up from sheet metal, and have on one side a disk into which two holes are stamped, through which the wire fastening passes. On the opposite 40 side a large opening is left of sufficient diameter to allow the wire fastenings to pass freely through the same.

b b are the units forming one side of the chain. They differ from the units a a only in that the holes for the staples are not formed in the closed side.

I have thus described the construction and arrangement of the units a and b; but I make no claim here, broadly, to such structure, as I

have claimed the same in my application be- 50 fore referred to.

The wire staples c c are secured at the bent ends in the units b by soft solder, as is shown in Fig. 3. The staples pass through the units, as is shown in Fig. 2, and are secured by twist- 55 ing the two ends of the staple together and then cutting the surplus wire or stock off. As the large opening of the units on one side of the chain, as shown in Fig. 2, does not present a finished appearance, and as this opening is 6c liable to collect dirt, injuring the appearance of the chain, to avoid this difficulty, secure a finished edge, and protect the twisted end of the staple, I secure the cap d in the opening either by closing the ring over the edge of the 65 cap, as shown in Fig. 4, or by placing soft solder into the cap and pressing the same in the unit while sufficiently heated to melt the solder.

This improved chain does not expose any 70 part of the fastening, and is therefore stronger than other chains exposing the fastening, as the edges are more liable to wear than any other part. It presents a neater and more finished appearance, and is a more salable ar-75 ticle.

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

As a new article of manufacture, a chain composed of a series of units, each provided 80 with two apertures at one side and a single aperture at the opposite side, and arranged side by side, and interlapping at their ends with the next series of units, a series of closed units forming one side of the chain, a series 85 of open units forming the opposite side of said chain, a series of staples passing through the middle units and united to the closed sides of the closed units, and secured by twisting to the open side units, and caps secured within 90 the open units over the twisted ends of the staples, substantially as and for the purposes described.

HENRY A. CHURCH.

Witnesses:

M. E. EMERSON, J. A. MILLER, Jr.