(No Model.)

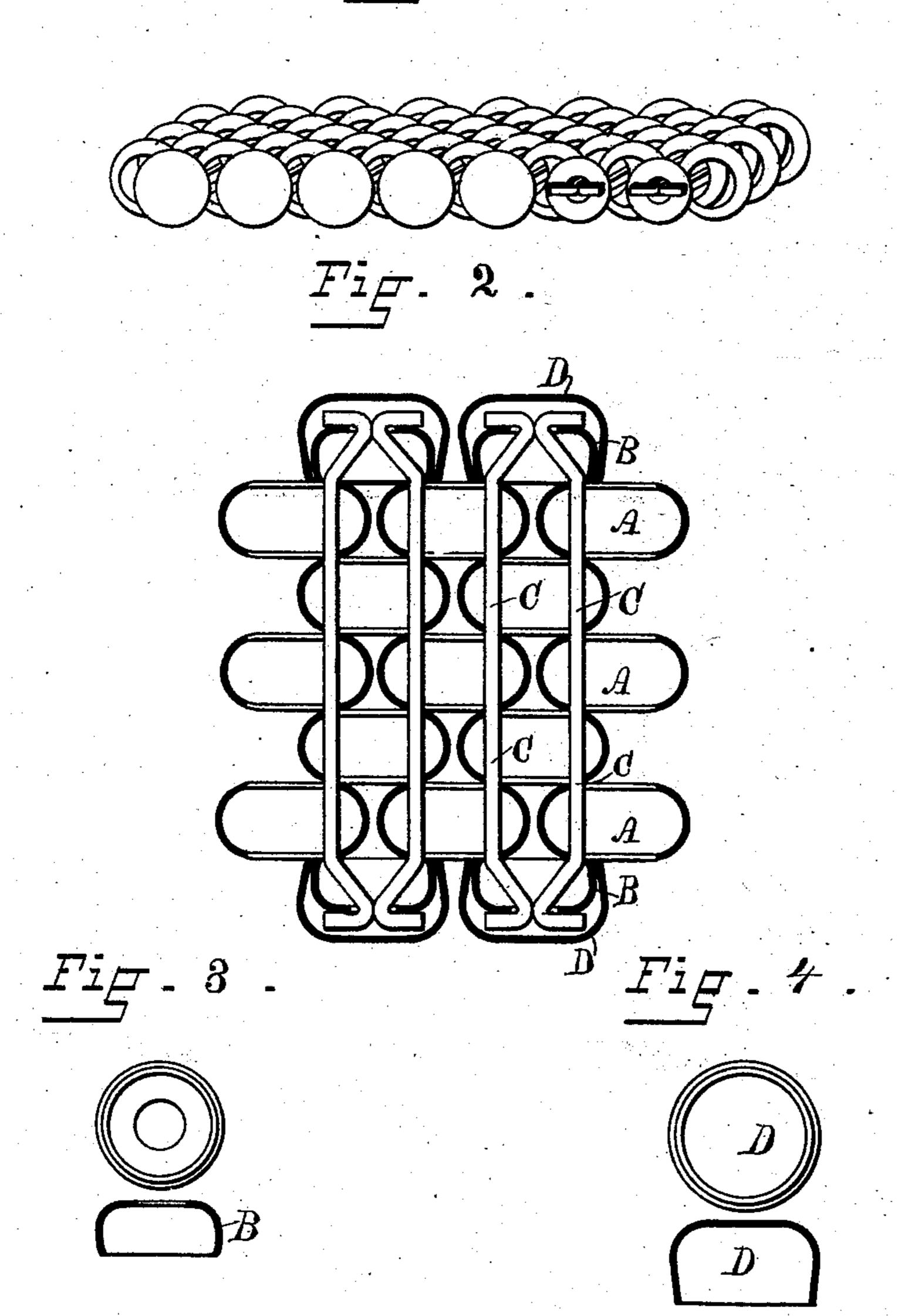
## W. BALLOU.

## ORNAMENTAL CHAIN.

No. 292,615.

Patented Jan. 29, 1884.

Fig. 1



WIINESSES.

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## ORNAMENTAL CHAIN.

SPECIFICATION forming part of Letters Patent No. 292,615, dated January 29, 1884.

Application filed October 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, Walter Ballou, of North Attleborough, in the county of Bristol and State of Massachusetts, have invented 5 certain new and useful Improvements in Ornamental Chains; and I hereby declare the following to be 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 construction of what are known as "roller-chains," or chains in which a large number of units are secured together to form the chain; and it consists in the peculiar and novel manner in which the connecting-wires are bent and secured to the end cap, as will be more fully set forth hereinafter.

When, as heretofore constructed, the staples or connecting-wires are bent over the end units in roller-chains, the same present an unsightly edge, and these ends are liable to catch in the clothing and be bent back, so as to release the units. To prevent this, the end units are usually provided with two holes, and a cap is inserted to close the end units.

The object of this invention is to make a stronger and more durable connection and protect the ends of the connecting-wires, so that a more finished appearance is secured.

Figure 1 is a perspective view of the improved chain. Fig. 2 is an enlarged sectional view of the same, showing the manner of bending and securing the binding-wires. Fig. 3 is an end view and section of the end cap, and Fig. 4 is an end view and section of the

In the drawings, A A A are the units of which the chain proper is formed.

B B are the end caps, provided with a central hole through which the ends of the bind-

ing-wires are passed and over which the same are bent, as is shown in Fig. 2.

C Care the binding-wires, which pass through the holes in the units A A and bind the same 45 together. These binding-wires C are bent near their ends, so that two will pass through the hole in the end caps, B. The extreme ends are now bent over the end cap and thus secure the whole firmly together.

The covering-caps D D are now forced over the end caps, B B, thus making a neat finish along the edges and protecting the ends of the binding-wires.

Chains made in this manner present a more 55 finished appearance along the edges, and as the binding-wires are bent toward each other they secure the units more firmly together. Both the bends of the wires C toward each other near the end and the bending over the 60 end caps assist in holding the units together.

It is obvious that staples may be used in place of the two separate wires C C.

Having thus described my invention, I claim as new and desire to secure by Letters Pat- 65 ent—

1. In a roller-chain, the combination, with the units A A of the end caps, B B, of wires or staples constructed to pass through the central holes of the end caps and the covering- 70 caps D D.

2. A roller-chain consisting of a number of the units A A and the end caps, B B, secured together by means of the bent binding-wires C C, as described, the ends of which being 75 protected by the covering-caps D D, as described.

WALTER BALLOU.

Witnesses:

M. F. BLIGH, J. A. MILLER, Jr.