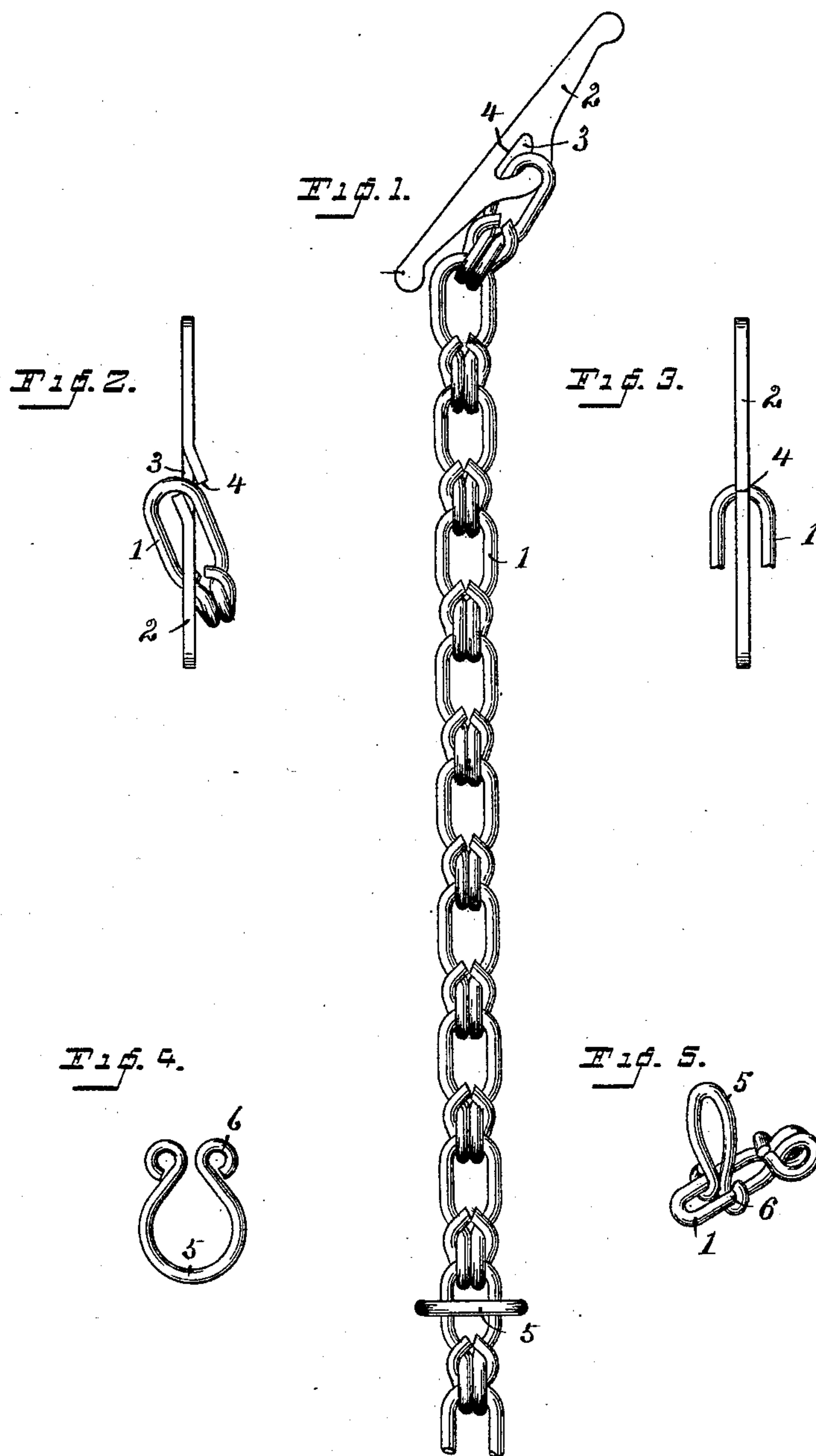


(No Model.)

R. A. BREUL.
CHAIN ATTACHMENT.

No. 428,798.

Patented May 27, 1890.



WITNESSES

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UNITED STATES PATENT OFFICE.

RICHARD A. BREUL, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE
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CHAIN ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 428,798, dated May 27, 1890.

Application filed October 8, 1889. Serial No. 326,329. (No model.)

To all whom it may concern:

Be it known that I, RICHARD A. BREUL, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Chain Attachments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the various classes of short chains which have gone into extensive use and are now manufactured and sold as independent articles—as, for example, halter-chains, kennel-chains, &c.—and has for its object to provide a novel loop and bar therefor, which shall greatly increase the efficiency in use, leaving all parts of the chain amply strong for every purpose to which it can be applied, which shall give to the chain a neat and attractive appearance, and in which the cost of production shall be reduced to the minimum. With these ends in view, I have devised the novel attachments of which the following description, in connection with the accompanying drawings, is a specification, numbers being used to denote the several parts.

Figure 1 is a view of one end of one of my novel chains complete; Figs. 2 and 3, views illustrating the construction of the cross-bar and the manner in which it is attached to the chain; Fig. 4, a view of the loop detached; and Fig. 5 is a perspective showing the loop connected to a chain-link, as in use.

The chain forms no portion of my present invention, it being of course apparent that any suitable chain may be used, although in practice I preferably use, and have illustrated in the drawings, the chain covered by my former Letters Patent, No. 359,054, dated March 8, 1887.

1 denotes the chain, and 2 the cross-bar. This cross-bar is struck out from sheet metal. It is made widest at the middle, as shown, and an opening 3 is punched out at the widest portion, care being taken, however, to leave sufficient metal upon the inner side of the bar to resist any possible strain. Upon the outer side of the bar is a cut 4 leading into the opening. The operation of attaching the bar to the chain is clearly illustrated in Figs.

2 and 3. The metal on opposite sides of the cut is pressed outward in opposite directions, as shown in Fig. 2. One end of the bar is then passed through the opening in the end link of the chain and the end of the link itself dropped into the opening 3 in the cross-bar. The metal of the bar is then closed together, as shown in Fig. 3, leaving the bar firmly connected to the last link of the chain. Operating in connection with this cross-bar is a loop 5. (See Figs. 1 and 4.) This loop is provided with an eye 6 at each end, which incloses the opposite sides of the link of the chain. In practice the ends of the eyes are opened outward, the sides of the chain-link to which it is desired to attach the loops are placed in the eyes, and the ends of the loop closed around the sides of the chain-link, leaving the loop, however, free to swing on the chain. This feature of connecting both ends of the loop with the opposite sides of a link of the chain is an important feature in use, as it retains the loop in convenient position to receive the cross-bar and prevents it from turning in every direction, as when an ordinary ring is used. At the other end of the chain in practice I place a snap-hook, which may be of any suitable or preferred construction.

Having thus described my invention, I claim—

1. The combination, with a chain-link, of a loop having eyes at opposite ends which engage the opposite sides of the link, thereby securing both ends of the loop firmly to the chain, leaving the loop free to swing, and a cross-bar connected to the chain and adapted to engage said loop.

2. A sheet metal cross-bar for chains, made widest at its central portion and having a central opening with a cut leading thereto from the outer edge of the bar, so that the metal on opposite sides of the cut may be pressed outward to permit a chain-link to be inserted in said opening, after which the ends are pressed together, thereby securing the bar to the chain.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD A. BREUL.

Witnesses:

JOHN CUMMINGS,
W. E. CUMMINGS.