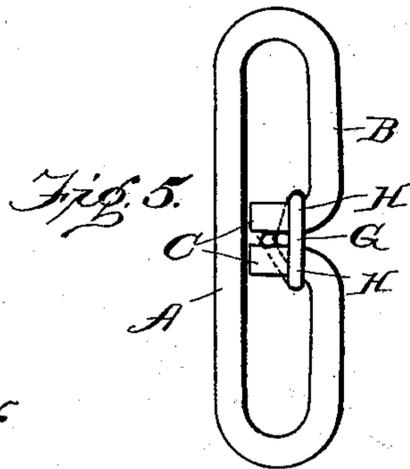
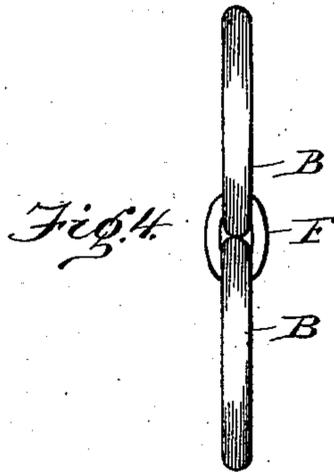
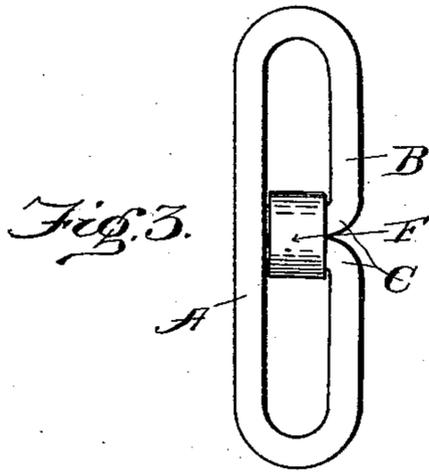
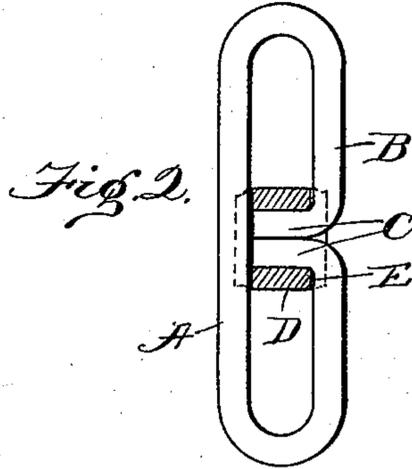
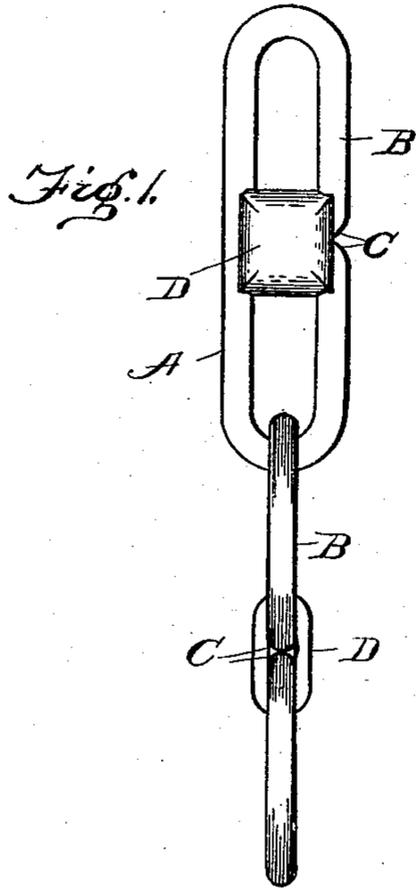


(No Model.)

J. C. SCHMIDT.
CHAIN LINK.

No. 543,356.

Patented July 23, 1895.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN C. SCHMIDT, OF YORK, PENNSYLVANIA.

CHAIN-LINK.

SPECIFICATION forming part of Letters Patent No. 543,356, dated July 23, 1895.

Application filed May 31, 1895. Serial No. 551,136. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. SCHMIDT, of York, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Chain-Links; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention relates to improvements in chain-links, and has for its object to provide a simple and compact link which can, if desired, be put together with automatic machinery, and which will, when completed, present a smooth and finished appearance, and at the same time be capable of withstanding greater strain than weldless chains of this character heretofore produced.

Referring to the accompanying drawings, Figure 1 is an elevation of two links constructed in accordance with my invention joined together. Fig. 2 is a sectional elevation showing the position of the ends of the bar or rod of metal in the preferred form of link. Fig. 3 is an elevation of a link having a slightly different form of connecting-piece. Fig. 4 is an elevation looking at right angles to Fig. 3. Fig. 5 is a perspective view of a link having still another form of connecting-piece for the ends of the bar of which the link is formed.

Like letters of reference in the several figures indicate the same parts.

In carrying my invention into practice I preferably form the links of rod or bar metal having the ends reflexed or doubled back to form loops at the ends of the link, the ends of the bar being brought into proximity to each other at an intermediate point and held together by a union or connecting piece lying within the link, and in position, if desired, to constitute a cross-bar for bracing the sides of the link against any tendency to collapse.

In the accompanying drawings, the letter A indicates the bar or rod metal from which the body of the link is formed, reflexed or doubled back at the ends of the link B, and the extreme ends C bent in substantially parallel to each other at approximately the center of the link, said inwardly-bent and substantially parallel ends being united by

a union or connecting piece D. I prefer to form the inwardly-extending ends of such length as to bridge the center of the link and rest against and support the opposite or straight side of the link, as shown clearly in Fig. 2. Thus, even though the union or connecting piece did not form a cross bar or brace, the link will be prevented from collapsing by the ends of the bar or rod. In this preferred construction it will be further noted that I have formed the union or connecting piece with edge concavities or seats E, into which the sides of the link fit. Thus when the union or connecting piece is rounded off, as in Figs. 1 and 2, the link is made smooth and symmetrical and at the same time it is securely braced against lateral bending or distortion.

Obviously the style or particular shape of the union or connecting piece is immaterial, and in Figs. 3 and 4 I have shown a simple bearing-collar F, into which the ends of the bar or rod are extended, and for a cheap construction this will probably be found to be efficient and desirable.

In Fig. 5, instead of a union-piece formed in a solid body, I have shown the ends of the rod united by a union-piece formed of a rod or bar of metal G of a small diameter bent to form eyes H, through which the ends of the bar constituting the link are passed.

The manner of forming the eye for the union-piece is quite immaterial, and I have shown the same formed by simply bending the small rods G around the ends C and passing the extreme end of the rod G through between the ends C, as shown clearly in said figures.

While any of these forms of union-piece will be found efficient, yet I prefer that shown in Figs. 1 and 2, wherein the union-piece is made of a solid body of metal—such, for instance, as malleable cast-iron; and in addition to the brace offered by the ends of the link to resist the tendency to collapsing, the union-piece itself forms a most efficient cross bar or brace both for resisting the tendency to collapse and for resisting any tendency of the link to become destroyed by lateral strain.

Having thus described my invention, what I claim as new is—

1. In a chain link formed of a rod or bar

of metal reflexed at the ends of the link with the extreme ends of the bar brought into proximity and extended toward the opposite or straight side of the link, and a union or connecting piece surrounding said ends and lying within the sides of the link; substantially as described.

2. A barred chain link formed of a rod or bar of metal reflexed at the ends of the link, with the extreme ends of the bar brought into proximity and extended across to the opposite or straight side of the link, and a union or connecting piece surrounding said ends and lying within the sides of the link; substantially as described.

3. A barred chain link formed of a rod or bar of metal reflexed at the ends of the link, with the extreme ends of the bar brought into proximity and bent at an angle crosswise of the link, and a union surrounding said ends and bridging the space between the sides of the link to form a cross bar; substantially as described.

4. A barred chain link formed of a rod or bar of metal reflexed at the ends of the link, with the extreme ends of the bar brought into

proximity and extended across to the opposite side of the link in substantially parallel lines, and a union surrounding said ends and bridging the space between the sides of the link; substantially as described.

5. A barred chain link formed of a rod or bar of metal reflexed at the ends of the link, with the extreme ends of the bar brought into proximity and bent at an angle crosswise of the link, and a union for said ends having seats in diametrically opposite edges for the side bars of the link; substantially as described.

6. A barred chain link formed of a rod or bar of metal reflexed at the ends of the link with the extreme ends of the bar brought into proximity and extended across to the opposite side of the link, and a union for said ends having concave seats in diametrically opposite edges for the side bars of the link and rounded sides whereby no angular projections are left; substantially as described.

JOHN C. SCHMIDT.

Witnesses:

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