(No Model.)

H. W. & F. C. CALDWELL.

DRIVE CHAIN.

No. 307,011. Patented Oct. 21, 1884.

Fig. 1.

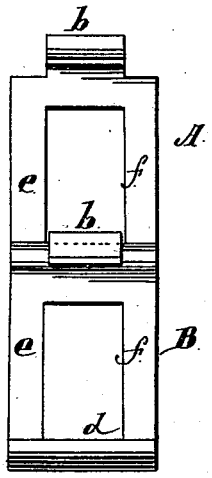


Fig. 4.

Fig. 5.

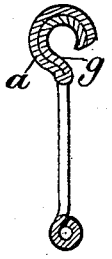


Fig. 3.

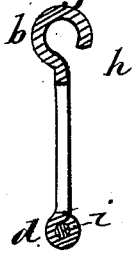
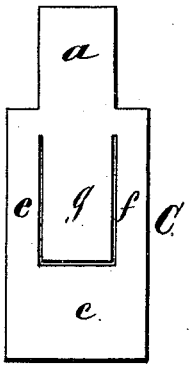


Fig. 2.



Witnesses:
E. A. West
Albert H. Adams.

Inventor:
Henry W. Caldwell
Frank C. Caldwell

UNITED STATES PATENT OFFICE.

HENRY W. CALDWELL AND FRANK C. CALDWELL, OF CHICAGO, ILLINOIS.

DRIVE-CHAIN.

SPECIFICATION forming part of Letters Patent No. 307,011, dated October 21, 1884.

Application filed July 28, 1884. (No model.)

To all whom it may concern:

Be it known that we, HENRY W. CALDWELL and FRANK C. CALDWELL, residing at Chicago, in the county of Cook and State of Illinois, and citizens of the United States, have invented new and useful Improvements in Drive-Chains, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation showing two of our links connected together. Fig. 2 is a blank from which a link is formed. Fig. 3 is a vertical section showing the lower end of the link bent around a wire or pin, as hereinafter described. Fig. 4 is a vertical section showing the central part, *g*, shown in Fig. 2, bent over against the part *a*. Fig. 5 shows the parts *a g* bent over to form the open hook.

Our invention relates to improvements in drive-chains the links of which can be readily separated from each other; and the object of our improvement is to provide drive-chain links made from sheet metal, which will be strong and which will not be likely to be accidentally separated one from another when in use in a chain, and which can be easily connected together and detached from each other, which object we attain as illustrated in the drawings, in which—

A B represent two of our links connected together.

C shows the form of the blanks from which the hooks may be made, which blanks are cut from sheet metal.

a is that part of the blank from which the open hook *b* of the link is made by bending into proper shape.

c is that part of the blank from which the end bar, *d*, of the link is formed by bending it into proper shape. This part *c* must be long enough to permit it to be turned over upon itself, or around a piece of wire, and when so formed this bar will have sufficient size and strength.

e f are the side bars. As shown in Fig. 3, the central part of the blank is cut out entirely.

To secure a sufficiently-strong hook we cut the central part of the blank on three sides, as shown in Fig. 2, and do not detach this central part from the blank, but turn such part *g* over against the part *a*, as shown in Fig. 4, and then bend the two parts *a g* into proper shape to form an open hook, as shown in Fig. 5. The opening *h* of the hook is to be large enough to permit it to be passed over one of the side bars, *e f*, to couple the links together or detach them from each other; but such opening is not to be large enough to allow the bar *d* to pass through it. The wire or pin *i* is shown in Fig. 3, over which the part *c* of the blank is turned to form the bar *d*, and the use of this wire or pin facilitates the turning of the part *c* into proper shape, and also gives additional strength, such wire or pin *i* being left in the center of the part *d*, and when used forming a part thereof.

What we claim as new, and desire to secure by Letters Patent, is—

1. A sheet-metal drive-chain link having its hook portion re-enforced by an extra thickness of metal cut and bent from the body of the link, substantially as described.

2. A sheet-metal drive-chain link having its hook portion re-enforced by an extra thickness of metal cut and bent from the body of the link, and its end bar formed by bending the metal upon itself, substantially as described.

HENRY W. CALDWELL.
FRANK C. CALDWELL.

Witnesses:
ALBERT H. ADAMS,
HARRY T. JONES.