(No Model.)

C. P. MARS.

DRIVE CHAIN.

No. 480,853. Patented Aug. 16, 1892.

Fig. 1.

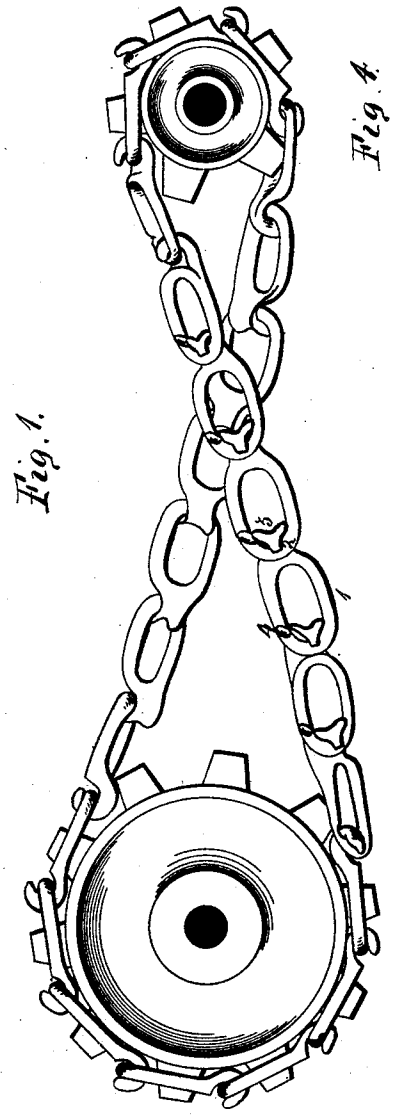

Fig. 4.

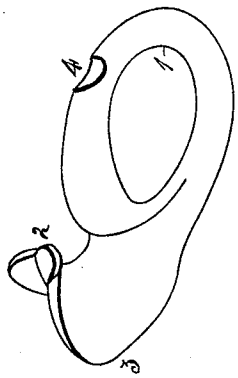

Fig. 5.

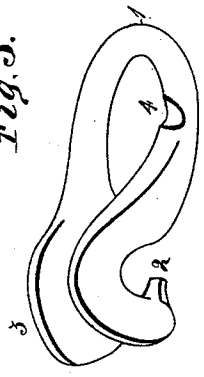

Fig. 2.

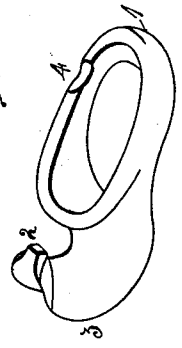

Fig. 3.

Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES P. MARS, OF ROCKFORD, ILLINOIS, ASSIGNOR OF ONE-HALF TO JAMES P. EDIE, OF SAME PLACE.

DRIVE-CHAIN.

SPECIFICATION forming part of Letters Patent No. 480,853, dated August 16, 1892.

Application filed January 18, 1892. Serial No. 418,442. (No model.)

To all whom it may concern:

Be it known that I, CHARLES P. MARS, a citizen of the United States, residing at Rockford, county of Winnebago, State of Illinois, have invented certain new and useful Improvements in Link Belting, of which the following is a specification.

The object of this invention is to produce a chain of great flexibility and strength and one which may be run "crossed" or twisted at any degree less than a half-turn without undue friction and binding of the parts.

In the drawings, Figure 1 is a side elevation of the chain belt stretched around two sprocket-wheels and running crossed between them. Fig. 2 is a perspective representation of a single link from the chain belt. Fig. 3 represents the link shown in the preceding figure in a different position. Figs. 4 and 5 show a modified form of the links of the chain.

The form of the links, as shown in Figs. 1, 2, and 3, is substantially oblong or, perhaps more accurately, the shape of a rectangle, whose corners have been "rounded off," as the sides of the link are quite straight, though the ends are somewhat curved. One end of this oblong portion 1 of the link extends downward and forward, thence curving upward in hook form terminates in the central tongue 2.

The before-described hook 3 has downwardly-projecting edges or wings, giving its transverse section at any point a semi-tubular or inverted-U shape. This arrangement of the metal confers upon the hook 3 great strength and lightness. Where the hook joins the oblong portion 1 of the link the wings or flanges of the hook taper off gradually, meeting the line of the portion 1 about midway of its length. A side elevation of the link would thus show the line of the upper portion 1 to be on a level with the top of the hook, above which extends the tongue 2, which when the link is cast must be bent over toward the portion 1 with a few blows of a hammer.

In one of the side bars of the portion 1 of the link on both the upper and lower faces I form the rearwardly and inwardly extending depressions 4, by means of which I am enabled to slip the hook of the second link over the rear end of that portion 1 of the first, and so on until a sufficient length is obtained, when the hook of the first link is placed over the rear bar of the last and the chain belt is completed.

The curve of the inner face of the rear bar of the link conforms as nearly as may be to the forward inner face of the hook, that as great a wearing-surface as is possible may be obtained, the twist in the whole belt being derived by a slight inclination of one link to each adjacent link produced by the link turning upon the hook of the preceding one.

In the form of the link shown in Figs. 4 and 5 the part corresponding to the portion 1 of the before-described link is of ring form, the hook being of the same semi-tubular form, depending from one side of the ring and merging into its outlines in manner similar to the same parts in the oblong link.

The depressions 4, previously described in relation to the oblong link, are produced in the upper and lower faces of the ring and are similarly numbered and have a like purpose, as is also the case with the tongue extending from the hook 3.

This chain is run with the open end of the hook turned away from the sprocket-wheel.

I claim as my invention—

A link for link belting having a frame, a hook extending downwardly and forwardly from one end thereof, said hook having curved wings from its sides, giving to it a U shape or semi-tubular transverse section, a tongue extending rearwardly from the upper end of the hook, and a rearwardly-inclined depression in the upper and lower faces of one side of the link.

CHARLES P. MARS.

Witnesses:
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