

(No Model.)

E. S. LEAYCRAFT.
LINK BELTING.

No. 576,591.

Patented Feb. 9, 1897.

Fig. 1.

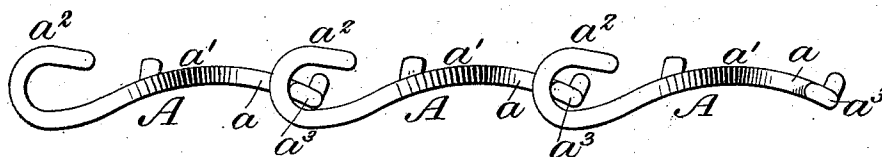
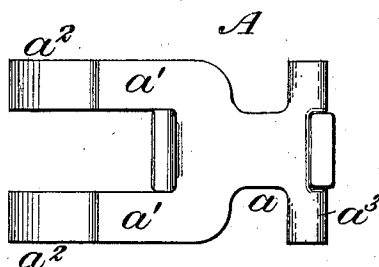


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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LINK BELTING.

SPECIFICATION forming part of Letters Patent No. 576,591, dated February 9, 1897.

Application filed December 15, 1894. Serial No. 531,988. (No model.)

To all whom it may concern:

Be it known that I, EDWIN S. LEAYCRAFT, of Jersey City, in the county of Hudson and State of New Jersey, have invented a certain new and useful Improvement in Link Belting, of which the following is a specification.

I will describe a link belt embodying the features of my improvement and then point out the novel features in a claim.

In the accompanying drawings, Figure 1 is a side view of a length of link belting embodying my improvement and comprising three links. Fig. 2 is a top view of one of the links shown in Fig. 1.

Similar letters of reference designate corresponding parts in both figures.

The belting is composed of a series of similar links A, joined end to end. Each link embodies within itself at or near its extremities means for pivotally attaching it to adjacent links and intermediate of its extremities an opening through which protrudes the tooth of the engaging sprocket-wheel. Each link comprises a shank portion a and a bifurcated or forked portion, the opening between the two branches a' a' of which is of a width sufficient to permit the entrance of the shank portion of the succeeding link.

The two branches or arms a' a' are doubled over upon themselves at their outer extremities to form loops a^2 a^2 . At the opposite extremity the link is provided with a cross-piece a^3 , forming a journal-piece or rocker extending transversely to the length of the shank a and adapted to extend across and engage in the bight of the loops a^2 a^2 of the contiguous link.

The depth of the opening between the arms a' a' and the length of the loops a^2 a^2 will be such that two links may be easily disengaged from each other by slipping an engaging link backward toward the base of the arms a' a' and then giving the same a slight twist. A reverse operation serves the purpose of engaging the links.

The inner or bearing surface of the cross-piece a^3 will preferably be rounded. The longitudinal axial extremities of the shank a or those portions against which the faces of the

sprocket-tooth bear will also preferably be rounded.

The cross-piece or rocker a^3 , which serves for the pivotal attachment of a link to an adjacent link, will preferably be of a flattened or of a rectangular cross-section. This will facilitate the cleaning of its bearings at the bottom of the loops a^2 a^2 , the two engaging surfaces sliding over each other to some extent as the links pass on and off the sprocket-wheels.

The inner edges of the extremities of the cross-piece or rocker a^3 or those parts which bear against the inner surfaces of the loops a^2 a^2 extend at right angles to the longitudinal center line of the shank a , the better to resist any tendency to spread the loops sideways as well as to transmit the strain in the best manner.

Each link may be bent longitudinally, the better to conform to the curved outline of the wheel. In this case the straight line joining the bearing-surfaces at opposite ends of the link representing the line of strain on the link when the latter is in operation will be so related to the disposition of metal in the link as that the link will resist the pulling force.

The link used in this belting will preferably be formed from sheet metal by stamping the same, for instance, to form, and offers especial advantage in ease and economy of construction. A chain made from links of this form, which are of light weight as well as easily detachable one link from another, is yet capable of transmitting great power. These qualities render its employment as the drive-chain of a bicycle especially advantageous.

Having described my invention, what I consider as new, and desire to secure by Letters Patent, is—

A link for a drive chain or belt, comprising a shank portion having at one extremity a journal-piece, or rocker of flattened cross-sectional outline, and whose bearing edges extend at right angles to the longitudinal center line of the shank portion, and at the other extremity a bifurcate portion whose two arms are bent over at their ends to form loops

having an internal diameter larger than the thickness of the journal-piece or rocker, and a projecting tongue, the link having an opening between the arms of the bifurcate portion
5 for the entrance of an engaging tooth, substantially as specified.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

EDWIN S. LEAYCRAFT.

Witnesses:

THOS. W. HARRIS,

EDWIN S. BABCOCK.