

(No Model.)

C. E. HART.
DRIVE CHAIN.

No. 473,392.

Patented Apr. 19, 1892.

Fig. 1.

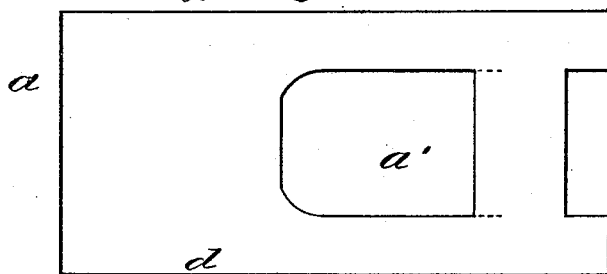


Fig. 2.

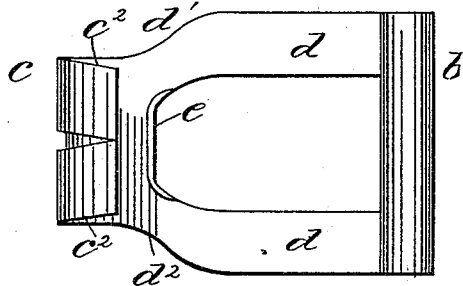


Fig. 3.

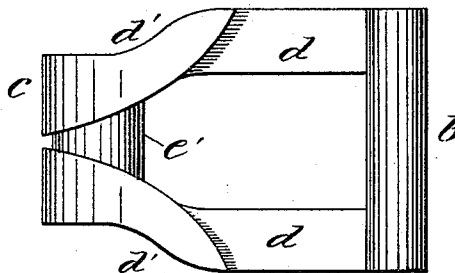
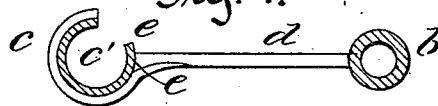


Fig. 4.



Witnesses
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CHARLES E. HART, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE
STANLEY WORKS, OF SAME PLACE.

DRIVE-CHAIN.

SPECIFICATION forming part of Letters Patent No. 473,392, dated April 19, 1892.

Application filed February 1, 1892. Serial No. 419,869. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. HART, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Drive-Chain Links, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

My invention relates to the general class of drive-chains that are made up of a number of separable links that may be readily engaged with and disengaged from each other without requiring the link to be opened out at any joint; and the object of my invention is to provide a cheap, simple, and durable link usable in making up a chain of this kind.

My invention consists in the details of the several parts making up the drive-chain link as a whole, as more particularly hereinafter described, and pointed out in the claim.

Referring to the drawings, Figure 1 is a plan view of a blank from which the improved link is formed. Fig. 2 is a detail top view of the link after it has been formed to shape. Fig. 3 is a detail back view of the completed link. Fig. 4 is a detail view in central section of the link on the plane denoted by the line $x-x$ of Fig. 2.

In the accompanying drawings, the letter a denotes the blank that is cut or stamped from a sheet of metal of a thickness determined by the size of the link and the work to be done by the chain composed of a number of such links. The blank is substantially oblong in outline and is cut away in the center at a' to form the opening into which the teeth of the sprocket-wheel extend when the drive-chain is in use.

One end of the blank a is of a shape and of a length adapting it to be rolled up to form a pintle b , or the pintle may be formed by swaging up the metal, the only essential being that the pintle shall be, as to its center

part, substantially cylindrical in form, so as to fit into the socket c' in the knuckle c , 45 that is formed at the opposite end of the link. The knuckle end of the blank and the front part of the side parts d are formed of a double thickness of metal at the edges by folding the corners of the blank over upon the main 50 part and rolling up the knuckle, so that the edge d' is a folded edge and the ends c^2 of the knuckle are made of a double thickness. The inner edge of the knuckle is formed by swaging up a lip e , the edge of which extends 55 sufficiently above the plane of the frame of the link as to present a rounded bearing-face e' to the side of the sprocket-tooth with which that side of the knuckle comes into contact in the use of the chain. The knuckle is rolled 60 into a cylindrical shape and is of a length slightly less than the width of the opening a' near the pintle, so that when the pintle is inserted in the pintle-socket c' the upper end of the knuckle extends through the opening 65 a' and partly around the pintle, the several links being thus pivoted together in succession and forming, when thus united, a continuous chain. Such a link is comparatively cheap in construction and is extremely strong, 70 the folding of the metal strengthening the parts upon which a great part of the wear and strain in use is brought.

I claim as my invention—

As an improved article of manufacture, a 75 drive-chain link formed of a single piece of plate metal with the center part open, an integral pintle at one end of the link, and a curved knuckle at the other end, the side edges of the plate being folded inward and upon the 80 knuckle at each end thereof, all substantially as described.

CHARLES E. HART.

Witnesses:

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