

(No Model.)

J. W. BROWN.
DRIVE CHAIN.

No. 466,735.

Patented Jan. 5, 1892.

Fig. 1.

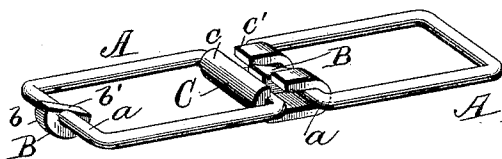


Fig. 2.

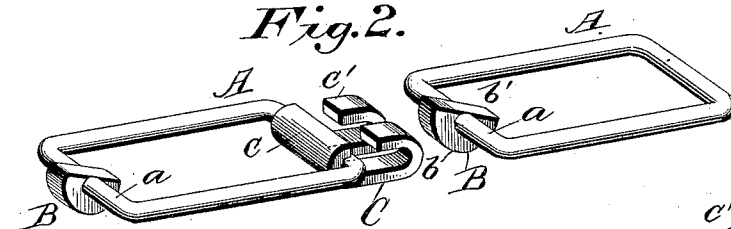


Fig. 3.

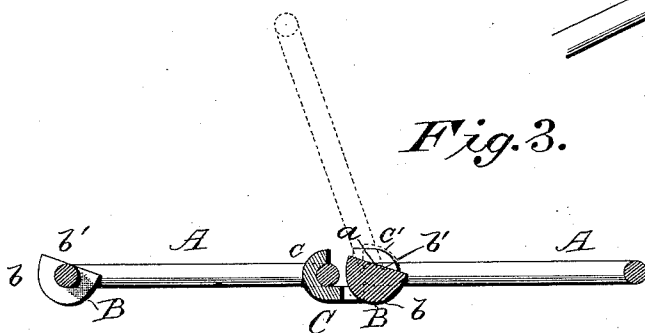
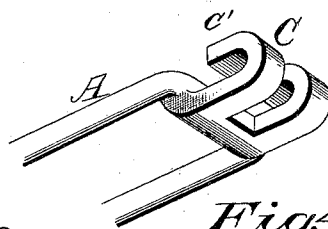


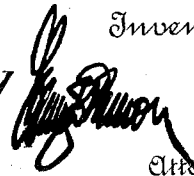
Fig. 4.



James W. Brown.

Inventor

Witnesses L. S. Elliott.
E. M. Johnson

by  Attorney

UNITED STATES PATENT OFFICE.

JAMES W. BROWN, OF VAN WERT, OHIO, ASSIGNOR OF ONE-HALF TO JOHN M. TRYON, AUGUSTUS L. SWEET, AND HENRY W. BLACHLY, OF SAME PLACE.

DRIVE-CHAIN.

SPECIFICATION forming part of Letters Patent No. 466,735, dated January 5, 1892.

Application filed July 30, 1891. Serial No. 401,215. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. BROWN, a citizen of the United States of America, residing at Van Wert, in the county of Van Wert and State of Ohio, have invented certain new and useful Improvements in Endless Drive-Chains; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to endless chains which are adapted for use as drive-chains and in which the links are detachable so that said chain can be shortened when desired; and the invention consists in a drive-chain which is made up of links having cams formed on one of the end cross-bars and couplers bent to form loops, one of which is bifurcated to receive the cam, said cam having a straight face at an angle with the side bars of the link, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification, Figure 1 is a perspective view showing the links and couplers connected to each other. Fig. 2 is a perspective view showing the links detached. Fig. 3 is a longitudinal sectional view, and Fig. 4 is a perspective view, of a modification.

A A designate the links, the end cross-bar *a* of each having formed integral therewith or attached thereto a cam B, said cam having a rounded edge *b* and a straight edge *b'*, disposed at right angles with the side bars of the link. The curved face of this cam is slightly more than a semicircle, and when in engagement with the coupler will not extend below the lower surface thereof.

The coupler C is made up of a single piece, the ends being bent to form the hooks *c* and *c'*, the hook *c'* being longer than the hook *c* and is bifurcated so that the furcated portions embrace the cross-bar *a* of the link while the cam lies between them. When it is desired to connect the links, the plain end of one of the links is passed into the hook *c* of

the coupler and the coupler allowed to depend therefrom. The adjacent link is then held so that the straight face of the cam is substantially horizontal when it may be passed through the slot in the hook *c'*, and when the parts are brought on a line with each other they will be locked. The links may be connected by elevating the end, as shown in dotted lines, Fig. 3.

I am aware that prior to my invention it has been proposed to provide a drive-chain with links having eccentrics or cams on each of the cross-bars and a coupler having an interior groove, so that the links can be connected to each other by a lateral movement, and I do not claim such construction as my invention. The cam which I employ prevents lateral movement of the links with respect to the coupler, and serves to keep the couplers on a line without undue friction or bearing against the inner sides of the link.

If desired, the coupler C may be dispensed with as a separable portion of the chain and formed integral with the link on the opposite end from the cam B, and when so constructed can be cast or forged as part of the link and will provide means for connecting the cam portion of the adjacent link thereto.

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

1. In a drive-chain having detachable links, a cam B, formed on one of the end cross-bars of each link, said cam having a curved portion which extends beyond the cross-bar and is concentric therewith, the other portion of the cam having a straight face, which also extends beyond the cross-bar, the same being disposed at an obtuse angle with the side bars of the link, and a coupler which is bifurcated or slotted for the reception of the cam and engagement with the cross-bar of the adjacent link, substantially as shown, and for the purpose set forth.

2. In a drive-chain having detachable or separable links, a cam B, formed centrally on one of the end cross-bars of each link, said cam having a segmental projecting portion concentric with the cross-bar and a straight face at an obtuse angle with the side bars of

the link, a coupler C, having a bent end slot-
ted to form two members which are adapted
to engage with the cross-bar of an adjacent
link, so that the cam formed thereon will lie
5 within the slot and flush with the surface of
the coupler, substantially as shown, and for
the purpose set forth.

In testimony whereof I affix my signature in
presence of two witnesses:

JAMES W. BROWN.

Witnesses:

GEO. E. WILSON,
SAMUEL YOUNG.