(Model.)

J. J. SELDNER.

DRIVE CHAIN.

No. 302,785. Patented July 29, 1884.

Fig. 1.

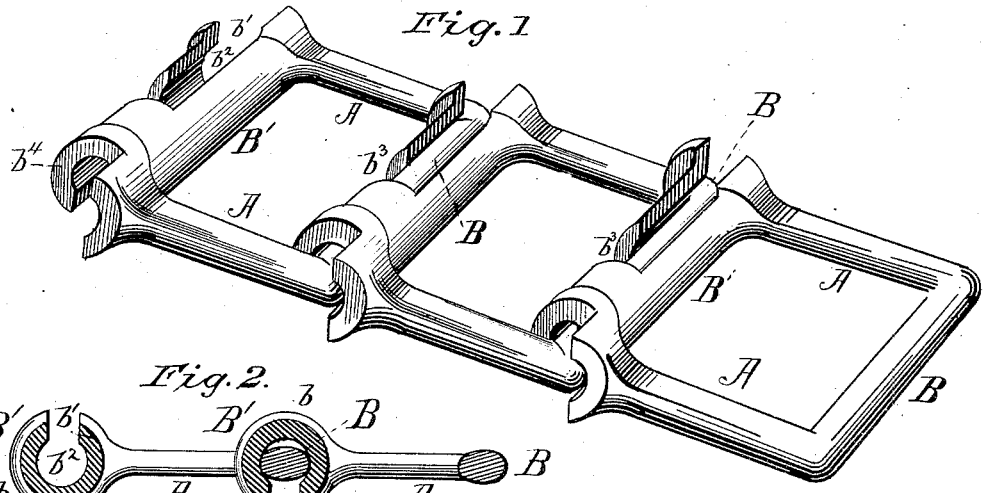


Fig. 2.

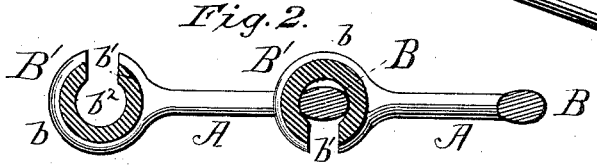


Fig. 3.

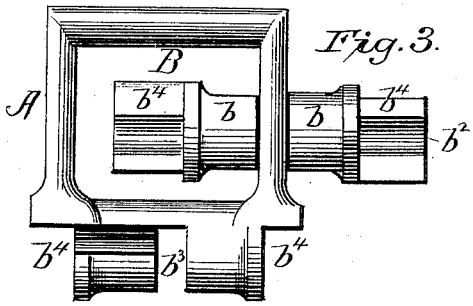


Fig. 4.

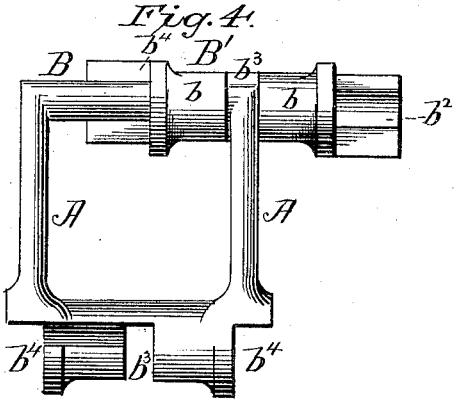


Fig. 5.

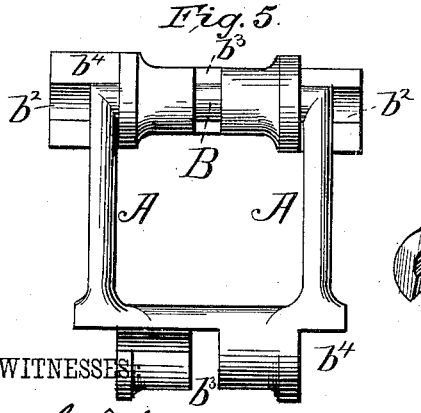
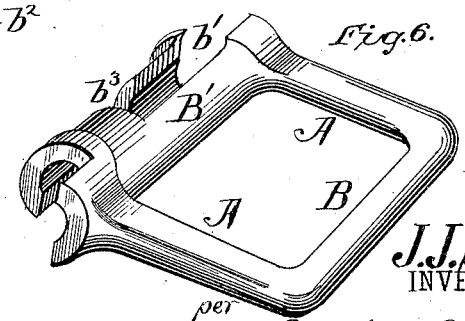


Fig. 6.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSEPH J. SELDNER, OF BALTIMORE, MARYLAND.

DRIVE-CHAIN.

SPECIFICATION forming part of Letters Patent No. 302,785, dated July 29, 1884.

Application filed September 18, 1883. (Model.)

To all whom it may concern:

Be it known that I, JOSEPH J. SELDNER, a resident of Baltimore city, Maryland, have invented certain new and useful Improvements in Links and Chains for Driving Machinery, of which the following is a specification, reference being had to the accompanying drawings, forming part hereof, in which—

Figure 1 is a perspective view of a chain constructed in accordance with my invention. Fig. 2 is a sectional view thereof. Fig. 3 shows two links of the chain in the first position in which they are placed in connecting them together to form the chain. Fig. 4 is a similar view in second position. Fig. 5 is a similar view in third position, or fully connected. Fig. 6 is a perspective view of the links.

Like letters of reference indicate same parts in all the figures.

My invention relates to that class of chains used for driving machinery which consists of independent links which, when in their operative positions, are so connected as not to be liable to accidental displacement, but when moved to a certain other relative position may be disconnected at will; and the object of my invention is to improve the construction and operation of such chains. In carrying out this object I construct a chain, as hereinafter fully described, the points of novelty of which will be specifically set forth in the claim.

Referring to the drawings by letter, A are the side bars of the links. B B′ are the end bars thereof, the general contour of the link being rectangular. The side bars, A A, are cylindrical in shape, and the end bar B is elliptical in cross-section. The general contour of the end bar B′ is cylindrical, parts being cut away, as now described. Each end of the end bar B′ of the link is made in the form of a hollow cylinder, *b*, having one side slotted, as at *b′*, as seen in Fig. 2, the slot *b′* being of less width than the central opening, b^2, which latter opening is of just sufficient extent to permit of the free turning of the end bar B of the link therein—that is to say, just slightly wider than the long diameter of the elliptical end bar B. The slots *b′* are located at opposite sides of the hollow cylinders *b*, and are just sufficiently wide to permit of the passage of the end bar B of the link through them into the inner portion, b^2—that is to say, just slightly wider than the short diameter of the end bar B of the link, and of less width than the long diameter is set in—so that when two links of the chain are connected together in operative position, the end bar B, being in the opening b^2, as seen in Fig. 2, the end bar B can be only removed therefrom by turning the links at right angles to each other, so that the smaller diameter of the end bar B will be presented to the slot *b′*. The two parts *b* of the end bar B′ of the link are separated from each other by a central slot, b^3, and the slots *b′* are located on opposite sides of these hollow cylinders *b*. When it is desired to connect two links together, they are placed in the position shown in Fig. 3, one of the side bars of one link being inserted in the slot b^3 of the other link. The first movement to be made is to slide the end bar B downward in the slot b^3 until it reaches the position shown in Fig. 4, when end bar B will have passed through the slot *b′* and into the central opening, b^2, of the other link. The next movement consists in sliding the links so that their side bars will be in the same plane, bringing the links into the relative position shown in Fig. 5. The end bar B is now within the central opening, b^2, of both hollow cylinders *b* of the end bar B′ of the other link, the longer diameter of the elliptical end bar B standing at right angles to the sides of the link. It is now only necessary, in order to bring the links into operative position to form the chain, as shown in Figs. 1 and 2, to turn the links until they assume said position, when, by reason of the elliptical shape of the end bar B and the relative size of its diameters when compared with the diameter of the central opening, b^2, it will be impossible for said end bar B to drop out of said opening b^2. A portion of each end of the end bar B′ of the link is cut away, as shown at b^4, in Figs. 1, 3, 4, 5, and 6, and the remaining portion of said end bar B′, when the chain is in operative position, as shown in Figs. 1 and 2, by the side bars, A, of the adjoining link, so that the links cannot slide sidewise upon each other when in operative position.

It will be observed that the metal in my improved links is evenly distributed on each side of a central line running longitudinally through the chain, so that the chain is evenly balanced, and may be used with either side out, being

readily reversible, which is one of the main features of my invention.

I am aware that links for drive-chains having one end formed with hooks pointed in opposite directions are not new, and do not, broadly, claim such construction.

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

A link for drive-chains, having cylindrical side bars, A A, the end bar B, elliptical in cross-section, and the end bar B′, consisting of the two hollow cylinders b, having slots b' in the opposite sides thereof, the hollow cylinders being separated by a slot, b^3, the elliptical end bar B the slot b', and central openings, b^2, being of the relative sizes set forth.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

JOSEPH J. SELDNER.

Witnesses:
J. MASON GOSZLER,
S. BRASHEARS.