(No Model.)

M. DUTRISAC.

DRIVE CHAIN.

No. 347,697. Patented Aug. 17, 1886.

Fig. 1.

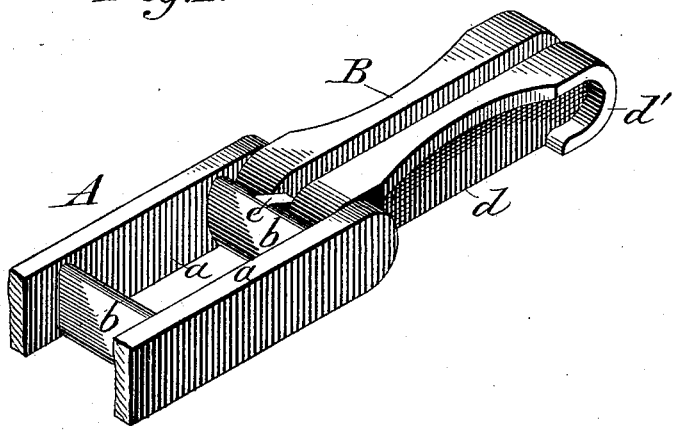


Fig. 2.

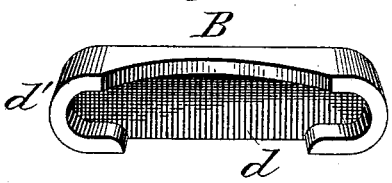


Fig. 3.

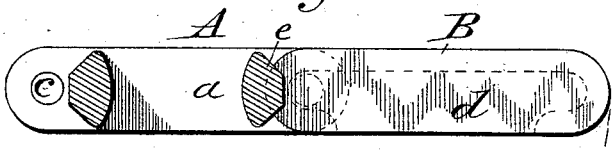
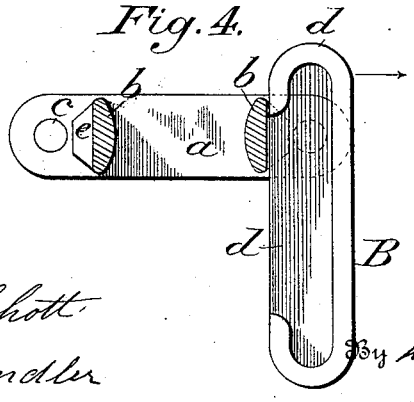


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

MOSES DUTRISAC, OF MUSKEGON, MICHIGAN.

DRIVE-CHAIN.

SPECIFICATION forming part of Letters Patent No. 347,697, dated August 17, 1886.

Application filed March 11, 1885. Serial No. 158,430. (No model.)

To all whom it may concern:

Be it known that I, MOSES DUTRISAC, a citizen of the Dominion of Canada, residing at Muskegon, in the county of Muskegon and State of Michigan, have invented certain new and useful Improvements in Drive-Chains, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in that class of chains commonly called "drive-chains" which are employed in connection with sprocket-wheels as gearing for the propulsion of machinery of various kinds, the drive-chain taking the place of the belt used with the ordinary hand-pulleys with this advantage, that while the belt is liable to slip upon the pulleys, thus allowing a difference in the rate of movement of the peripheries of the driving and driven pulleys, the drive-chain allows no slip, thus causing the movement imparted by it to be positive like that imparted by toothed gears, although the sprocket-wheels upon which the chain is carried may be at any desired distance from each other.

Another use to which these chains are put is to act as conveyers for grain, sawdust, or other materials, the chain when used for these purposes being generally connected with a series of buckets or other devices which serve to propel the material along a channel-way.

As large numbers of these chains are now employed in the various branches of manufacture, it becomes a great desideratum to produce an effective chain at the least possible cost; and to supply this want is the object of the present invention.

In the accompanying drawings, in which like letters indicate like parts in all the different figures, Figure 1 shows two links of a chain embodying my invention. Fig. 2 is a perspective view of one of a pair of connecting-links. Fig. 3 shows a longitudinal section of the main link with one of the connecting-links attached; and Fig. 4 is a similar section with the connecting-link at right angles to the main link, as in position for connecting the two.

It is intended to make all parts of this chain of cast metal. The several pieces of which it is composed are therefore formed so as to be readily molded, thus insuring cheapness of construction and an easy method of making repairs in case of breakage; but to more fully illustrate its construction, I will now proceed to give a description in detail of the several parts.

A represents one of the links, which is formed of two parallel bars, *a a*, united by the cross-bars *b b*, placed, respectively, near the ends of the bars *a a*, and united therewith in the process of casting, the whole forming a strong rectangular frame with rounded ends *a'* projecting beyond the cross-bars. Each of these ends is provided with an inward projecting stud, *c*, which extend toward each other, but do not meet, space being left between them for the entrance of the links B B, which form the connection between the several links A of the chain. These links B are formed of a plate, *d*, having rounded ends. A flange, *d'*, extends around the ends and on the sides of the plate *d*, adding strength and forming the hook-bearing at each end, by which it is connected with the studs *c* of the link A. A projection, *e*, upon one of the bars *b* extends outward from said bars between the links B B, and holds them in position upon the studs *c*, except when the said links are brought to a right angle with the links A, as shown in Fig. 4 of the drawings, in which position they may be either engaged or disengaged from the studs; but when the links are in a straight line with each other, as shown in Fig. 3, or approaching thereto, the bars *b* and projections *e* effectually prevent this disengagement, thus allowing the chain to pass around pulleys or to be flexed as much as is necessary for chains of this class when in use without danger of the parts becoming disconnected.

Having thus described my invention, I claim as new and desire to secure by Letters Patent the following:

In a drive-chain, the link A, formed of two parallel bars provided with inwardly-projecting headed studs *c* near their ends, said parallel bars being connected by cross-bars *b*, one of which has a projection, *e*, in combination with the links B, each consisting of a plate, *d*, and flange *d'*, the latter forming the hook by which the links B are connected with the studs *c* of the link A, substantially as shown and described.

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

MOSES DUTRISAC.

Witnesses:
GUSTAVE C. KRUEGER,
JAS. C. MCLAUGHLIN.