(No Model.)

P. F. HODGES.

CARRIER CHAIN.

No. 264,833. Patented Sept. 19, 1882.

Fig. 1.

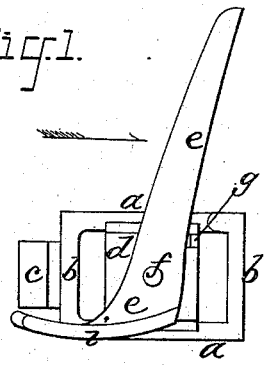
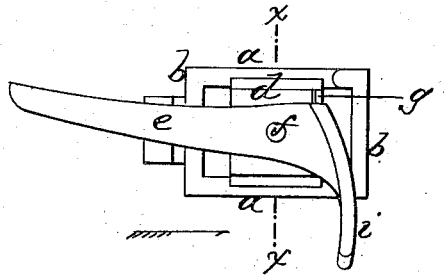


Fig. 2.



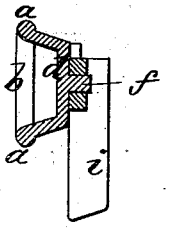


Fig. 4.

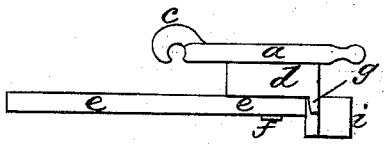


Fig. 3.

ATTEST:

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UNITED STATES PATENT OFFICE.

PLINY F. HODGES, OF CHICAGO, ILLINOIS.

CARRIER-CHAIN.

SPECIFICATION forming part of Letters Patent No. 264,833, dated September 19, 1882.

Application filed August 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, PLINY F. HODGES, of Chicago, in the county of Cook and State of Illinois, have invented an Improved Carrier-Chain; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this application.

My invention relates to a novel construction of chain-links adapted to carry pivoted or hinged fingers—such, for instance, as used on the carrier-chains of harvester-platforms—and also to a novel mode of combining such fingers with such links so as to have the fingers work in a plane parallel with the plane in which the link runs.

Previous to my invention it has been customary to employ on chains adapted to act as carrier-chains fingers hung pivotally to some of the link end bars and arranged to vibrate in a plane transverse to that in which laid the body of the link, all in a manner well known to those skilled in the art.

It is well known that in the use of carrier-chains on harvester-platforms it is often very desirable to arrange the chains to run on wheels, the axes of which are placed about vertically; but with the chains arranged to run thus the carrier-fingers cannot of course be applied to or combined with the links in the manner just above explained, but must be arranged in just an opposite manner relatively to the link. It has also been suggested to have the carrier-fingers mounted on the chain so as to move in a plane parallel with the plane of the link-body; but in such cases, so far as I know, the fingers have been pivoted at or near one of the side bars of the link, so that not only has the finger had an inadequate support laterally, but the arrangement of the finger had to be such as to have it lie wholly outside of the space bounded by the central opening of the link, in order to avoid conflict with the sprockets over which the chain might run.

To provide for use a link adapted to run on wheels placed relatively to the platform in the manner just explained, and at the same time adapted to carry the pivoted carrier-finger designed to protrude through the platform, is the main object of the first part of my invention, which to this end consists in a drive-chain link formed with bridge-like elevated carrier-support arranged across from one side bar to the other and adapted to form a support and bearing surface for a carrier-finger to be pivoted thereto, and also formed or provided with a stop to regulate the throw of such carrier-finger, all as will be hereinafter more fully explained.

The second part of my invention has for its object to provide for use such a chain-link provided with a pivoted carrier-finger adapted to work in a plane parallel to the plane of the link-body; and to this end it consists in the combination, with a chain-link having a projecting bridge-like portion, of a carrier-finger pivoted thereto, and means for controlling the extent of motion of said finger on its pivot, all as will be hereinafter more fully described.

To enable those skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, referring by letters to the accompanying drawings, in which—

Figure 1 is a face or side view of one of my improved links with a carrier-finger attached thereto according to my invention. Fig. 2 is a similar view of the same, but with the finger turned down or into an inoperative position. Fig. 3 is a top or edge view of the contrivance with the finger in the position seen at Fig. 2; and Fig. 4 is a vertical or cross section at the line *x x* of Fig. 2, looking in the direction indicated by the arrow.

In the several figures the same parts will be found designated by the same letters of reference.

a a are the side bars, *b b* the end bars, and *c* the coupler-hook, of what is known as an "Ewart" detachable chain-link.

Extending across from one to the other of the side bars, *a a*, and preferably cast integral with them, is a sort of elevated bridge, *d*, the shape and arrangement of which will be best understood from the drawings, where it will be seen that said portion *d* is of such form and is so placed relatively to the side bars, *a a*, of the link that, while it affords a flat surface or plane for the side of a carrier-finger, *e*, to rest and work against, it is wholly out of the way and cannot interfere with the ends of the teeth of the chain-wheel. The finger *e* is shown at-

tached to the portion *d* of the link by means of a pivoted teat, *f*, which is cast solid with and projects from the portion *d;* but the pivotal connection of the finger *e* and portion *d* may be effected by a separate pivot or rivet passing through holes in both *d* and *e*. The portion *d* is also formed or provided with a small projection or lug, *g*, which serves as a stop to limit the movement of finger *e* in each direction, coming into contact with one point of the finger *e* when the latter is up, as seen at Fig. 1, and with another point when said finger is down, as seen at Fig. 2. The lower end or heel of the finger *e* is formed with a rocker-like extension, as at *i*, for the usual purpose of affording a surface for the action of the way or other device on the harvester that operates to hold the finger positively in the position seen at Fig. 1 when the chain and finger are traveling in the direction indicated by the arrow at Fig. 1 and the finger is performing the operation of carrying the grain across the harvester-platform.

Of course my improved link and combined link and carrier may be used under various modifications and in different places, and the gist of my invention, it will be seen, consists, first, in the construction of the link so that a carrier-finger may be applied to and operate with it, as explained; and, second, in the combination, with such a link, of any carrier-finger arranged and adapted to work as explained.

What I therefore claim as of my invention, and desire to secure by Letters Patent, is—

1. A chain-link formed with an elevator bridge-like portion, *d*, adapted to support and afford a lateral bearing for a carrier-finger, which is pivoted substantially in the center thereof and provided with a stop for limiting the motion of said finger, substantially as set forth.

2. In combination with a chain-link having a finger-supporting device, a carrier-finger pivoted substantially in the center thereof, arranged to rotate in a plane parallel to the plane of the link-body, as set forth.

In witness whereof I have hereunto set my hand and seal this 29th day of July, 1882.

PLINY F. HODGES. [L. S.]

In presence of—
T. S. FAUNTLEROY,
GLENN G. HOWE.