

J. WELTY.
CHAIN TIGHTENER.
APPLICATION FILED JUNE 4, 1909.

952,773.

Patented Mar. 22, 1910.

Fig. 1.

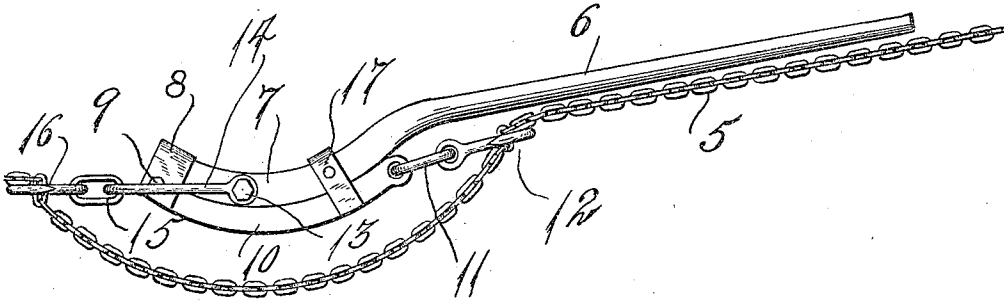


Fig. 2.

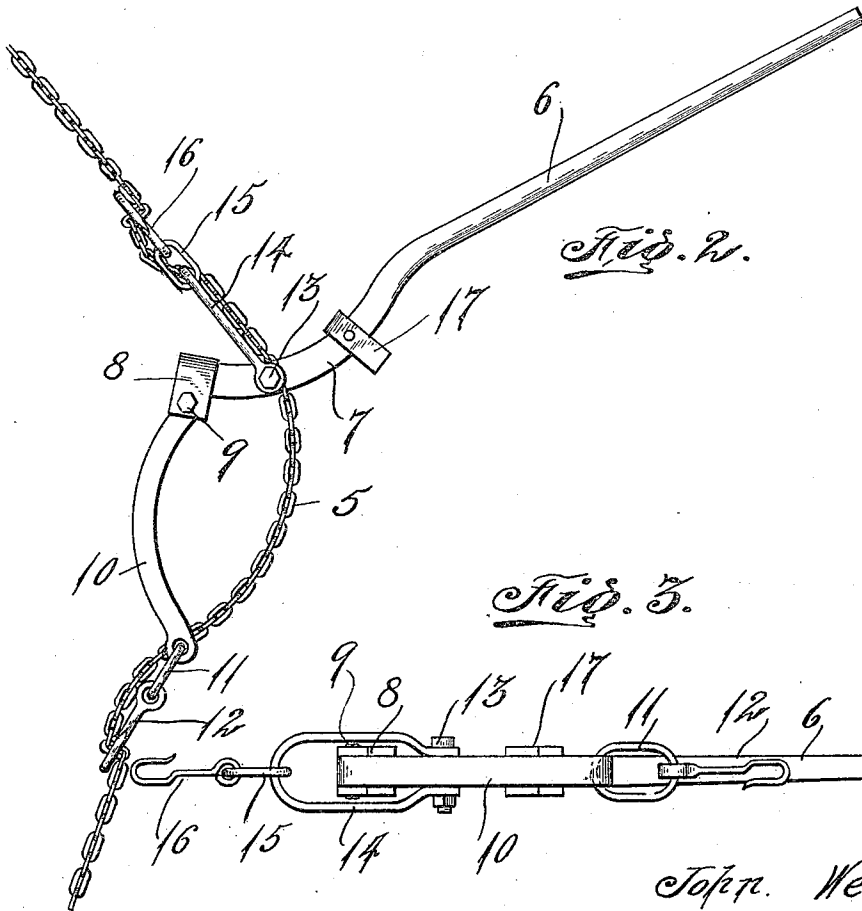
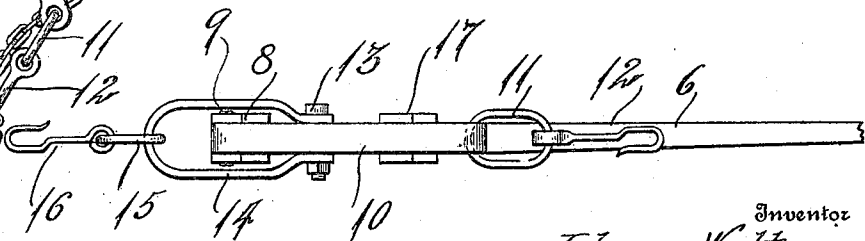


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN WELTY, OF MEYERS FALLS, WASHINGTON.

CHAIN-TIGHTENER.

952,773.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN WELTY, a citizen of the United States, residing at Meyers Falls, in the county of Stevens, State of Washington, have invented certain new and useful Improvements in Chain-Tighteners; 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.

The invention relates to a chain tightener and more particularly to the class of tighteners for use when hauling lumber, freight or machinery.

The primary object of the invention is the provision of a chain tightener in which a hauling chain or the like is adapted to be drawn taut so that the same may bind a load such as freight, lumber or machinery.

Another object of the invention is the provision of a chain tightener which is simple in construction, thoroughly reliable and efficient in operation, readily and quickly applied and adequate to stretch a chain or the like, and that is inexpensive in the manufacture.

With these and other objects in view the invention consists in the construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings, which disclose the preferred form of embodiment of the invention to enable those skilled in the art to practice the same, and as set forth in the claim hereunto appended.

In the drawings: Figure 1 is a side elevation of the invention as applied to a chain and in the act of stretching the same. Fig. 2 is a similar view with the tightener in position prior to the stretching of the chain. Fig. 3 is a bottom plan view of the tightener removed from the chain.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

In the drawings, the numeral 5 designates a chain preferably of the link type and of the ordinary and well known form. This chain is merely shown for the sake of illustration to exemplify the manner of application of the chain tightener as will be hereinafter fully described.

The chain tightener comprises a lever 6, the latter having a straight handle portion terminating at one end in a curved extremity 7 formed at its outer end with a substantially U shaped yoke piece integral therewith and forming spaced ears 8 between which is connected by means of a pivot 9 a bowed member 10, the latter correspondingly curved to the curved extremity 7 of the lever of the chain tightener. The outer end of the bowed member 10 has connected thereto by means of a ring 11 a hook 12, the same adapted to engage a link of the chain 5 between adjacent right angularly disposed links with respect to the link engaged by the said hook when gripping the chain.

Connected to the lever 6 by a pivot 13 a slight distance removed from the yoke is an elongated loop 14 to which latter is freely connected a ring 15 the same being also connected and supporting a hook 16, the latter being identical in construction to the hook 12 and this hook 16 is adapted to engage one link of the chain between adjacent links at a considerable distance removed from the point of engagement of the hook 12, of the tightener. This spreaded engagement of the hook members 12 and 16 with the chain is accomplished by the chain tightener when in an open position.

Secured to the lever 6 are spaced parallel friction engaging ears 17 which latter are adapted to receive therebetween the bowed member 10 when brought into the position contiguous to the curved extremity 7 of the operating lever and when the friction ears 17 engage the said member 10, the tightener will be maintained in its closed position.

It is obvious that due to the curvature both in the lever 6 and the bowed member 10 it permits a greater reach to the hook members 12 and 16 to engage a chain for bringing the same taut or stretching when the tightener is being operated. It will also be stated that the hook members may be connected to the bowed member and loop 14 by means of a plurality of rings connected together in lieu of the single links should the occasion demand.

Having thus described the invention what is claimed is:—

A device of the class described, comprising a lever, having a curved extremity, spaced

ears formed at the terminal of the curved
extremity, a bowed member having one end
pivoted between said ears, a loop pivotally
connected to the curved extremity, frictional
5 ears carried by the lever and adapted to en-
gage the bowed member when brought con-
tiguous to the same, and hook members
loosely connected to the curved extremity of

the lever and to the free end of the bowed
member respectively.

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

JOHN WELTY.

Witnesses:

L. X. JUNEAU,
H. E. POULINIER.