(No Model.)

T. A. BARBER.

LUMBER BINDER.

No. 524,663. Patented Aug. 14, 1894.

Fig. 1.

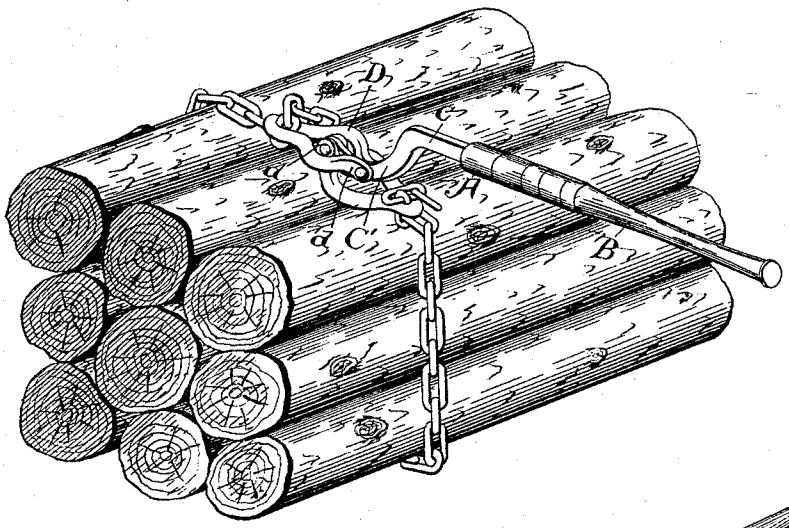
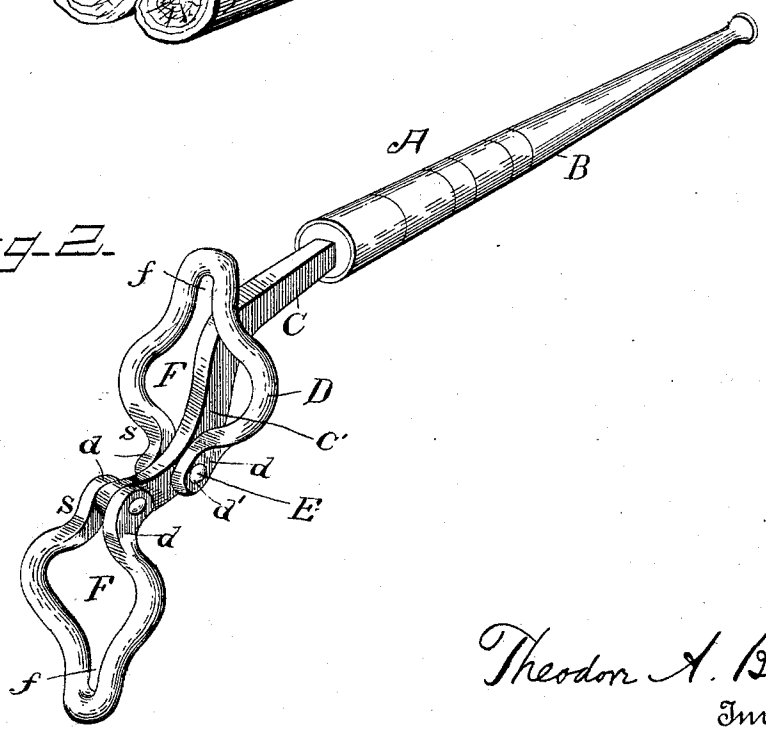


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

THEODORE A. BARBER, OF FALLS CREEK, PENNSYLVANIA.

LUMBER-BINDER.

SPECIFICATION forming part of Letters Patent No. 524,663, dated August 14, 1894.

Application filed October 5, 1893. Serial No. 487,238. (No model.)

To all whom it may concern:

Be it known that I, THEODORE A. BARBER, a citizen of the United States, residing at Falls Creek, in the county of Clearfield and State of Pennsylvania, have invented a new and useful Lumber-Binder, of which the following is a specification.

My invention relates to a tension device for tightening the binding chains employed for securing a load of logs, rails, or the like, or for removing heavy timbers and other loads.

The tension device embodying my invention is designed for use in connection with chains such as are ordinarily employed for the purpose named, and the object of my invention is to provide improved means for the ready engagement and release of the links of a chain, whereby the device may be applied and disconnected with facility.

Further objects and advantages of my invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings:—Figure 1 is a perspective view of a tension device embodying my invention applied in operative position to a binder for logs. Fig. 2 is a detail view in perspective of the device detached.

Similar letters of reference indicate corresponding parts in the several figures of the drawings.

The tension device embodying my invention comprises, essentially, a lever provided adjacent to one extremity with duplicate oppositely-extending pivotal links, which are spaced or arranged at different distances from the terminal of the lever and are provided with means for engaging the links of a chain or other flexible connection which is employed as a binder.

Referring to the drawings, A designates the lever, which comprises a handle, B, and a flat shank, C, projecting from one end thereof. The shank C is provided with an approximately segmentally-curved extension, C′, to the end and at about the center of which is pivotally secured a link, D. These links are similar in construction, and are in the form of loops, the terminals of which are separated sufficiently to receive between them the lever.

The terminals, *d*, of the links are curved reversely thereto, as shown at *s*, and are provided with eyes, *d′*, through which, and eyes, *c*, in the shank, are passed pivot-bolts, E. Each link is constructed to form an enlarged opening, F, and a contracted offset, *f*, communicating therewith at a point opposite the terminals *d*, said offset being designed to serve as a clutch for the links of the binding chain.

To engage a chain with a clutch constructed as described, one end of the chain is passed through the opening F, and one of the links of the chain is arranged side-wise within the offset *f*, the adjoining perpendicularly-disposed link of the chain being located at right angles thereto and extending across the offset.

The application of the device to the binding of logs is illustrated in Fig. 1, in which the pivotal links are engaged with the free ends of the chain in the manner described, the lever having been first inclined forward to assume a position in a plane approximately parallel with the draft or strain of the chain. The lever is now drawn backward until the links D lie in parallel planes, one above the other, when a permanent connection between the ends of the chain may be applied. If upon the first operation of the lever the binding chain is not sufficiently tightened, one end of the latter may be released from its clutch and drawn farther through the opening F and one of its links inserted in the offset *f* in the manner before described, when the lever is again drawn forwardly.

It will be observed that, by reason of the construction of the curved extension of the shank C, and the reverse curvature of the terminals of the links D, when the lever is drawn down the outer one of said links is carried over the inner link, and its pivot carried down behind the pivot of the inner link, thus locking the device against the tension of the chain.

In a manner similar to tightening a binding chain, by employing a stationary object,

such as an anchor, a movable object may be advanced, or two separated objects may be drawn toward each other.

I claim—

The combination, with the lever having a shank formed with a curved extension, of the links one pivoted about midway said curved extension and the other link pivoted at the outer end of said extension, each link having its terminals reversely curved to its body and spread apart and its opposite end formed with a contracted opening and, intermediately of said terminals and contracted opening, with an enlarged opening, and means connecting said links at their free ends, substantially as set forth.

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

THEODORE A. BARBER.

Witnesses:

FELIX MEARER,

W. F. REESE.