(No Model.)

G. GAGNON.

CHAIN OR CABLE GRIP.

No. 499,981. Patented June 20, 1893.

Fig. 1.

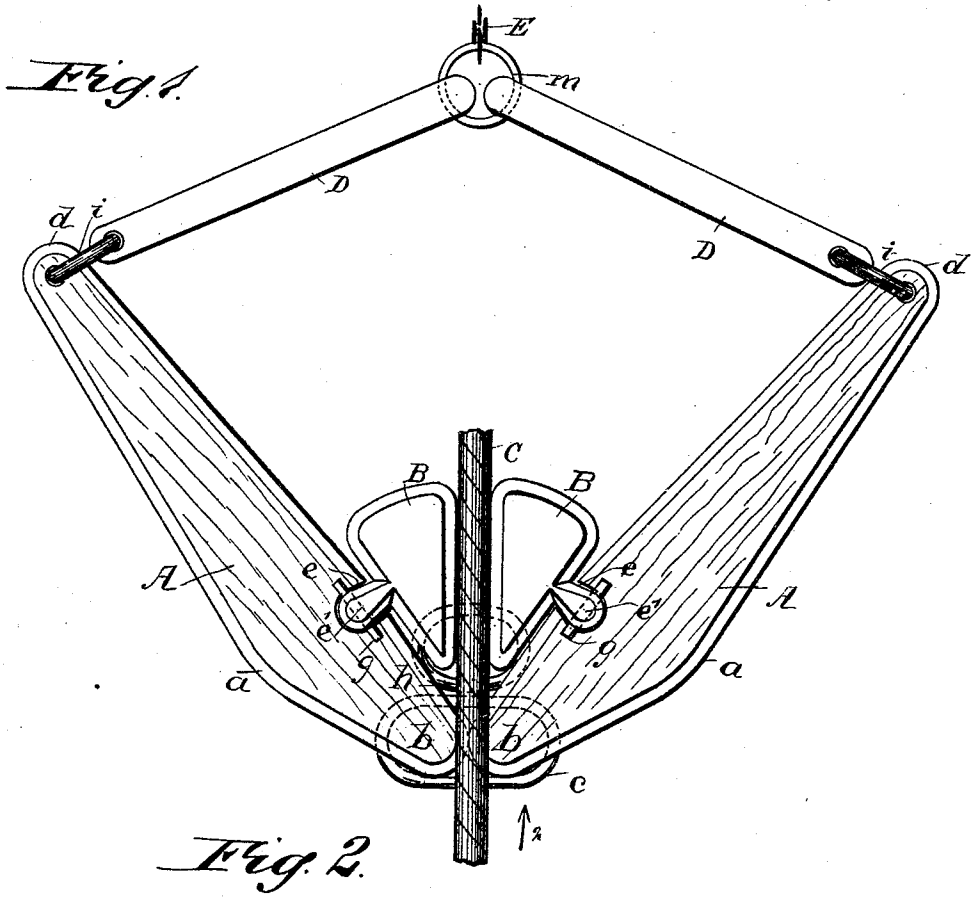
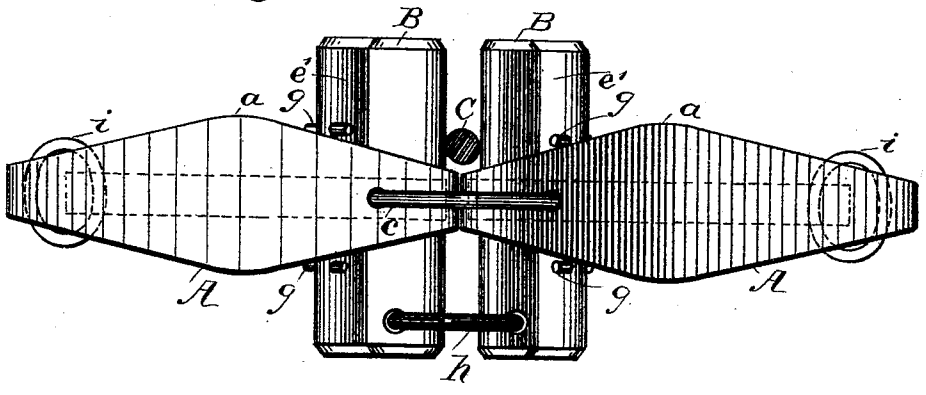


Fig. 2.



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CHAIN OR CABLE GRIP.

SPECIFICATION forming part of Letters Patent No. 499,981, dated June 20, 1893.

Application filed April 1, 1893. Serial No. 468,711. (No model.)

To all whom it may concern:

Be it known that I, GILBERT GAGNON, of Pincher Creek, Alberta, Northwest Territory, Canada, have invented a new and useful Chain or Cable Grip, of which the following is a full, clear, and exact description.

This invention relates to an improved means for the gripping of cables or other flexible connections used in the drawing of logs overland from place to place as occasion may require, and has for its object to provide a novel, simple, strong and convenient gripping device which may be quickly connected to the towing end of a logging chain or cable, which is secured at its other end to one or more logs, and furnishes means for the ready connection therewith of a traction motor or a team of draft animals, for the sliding movement of the log or logs to any desired location.

To these ends, my invention consists in the construction and combination of parts, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in both of the figures.

Figure 1 is a plan view of the device; and Fig. 2 is an end view opposite the arrow 2 in Fig. 1.

The improvement consists essentially of two similar heavy and strong levers A, which are tapered on the sides and edges a proper degree toward each end, from a point *a*, that is near one terminal *b*, of each of said pieces. The levers are shackled loosely together at their ends *b*, by the oblong link ring *c*, that is inserted through suitable perforations formed in said ends of the levers, which ends are rounded edgewise, to permit a vibration of the levers in a horizontal plane. Opposite the points *a*, the nearly straight adjacent edges of the levers A, are notched in ovate form, thus producing equal recesses *e* in said edges, which are rounded at their bases, and slightly converge their side walls from said bottoms outwardly, as shown in Fig. 1.

The levers A, are made to diverge from their ends *b*, toward their other extremities *d*, sufficiently to permit the introduction between them of the pair of similar gripping blocks B, and afford room for the proper operation of the latter. The blocks B, are triangular in cross section, approaching a wedge form, which shape adapts the blocks to occupy the angular space between the levers A, when the thinner portions of the blocks are located near the ends *b* of the levers A.

The grip blocks B, are given a proper length for effective use, and each block has a rib *e'*, projected from its side that is nearest to the inner edge of the adjacent lever A, and the ribs which extend of a proper length longitudinally on the grip blocks are so shaped in cross section, and relatively proportioned to the dimensions of the recesses *e*, that the ribs may be slid therein and fit loosely, which will allow the grip blocks to be swung slightly on the rounded bases of the recesses in the levers A. The length of the ribs *e'*, is equal to that of the grip blocks, so that they project above and below the levers; and are retained in the recesses *e*, with their bodies equally extended above and below the levers A, by the transverse pins *g*, that are inserted through suitable perforations made in the ribs, as is plainly shown in Fig. 2.

The wedge-like form of the grip-blocks B, in cross section, and their location between the levers A, as stated, produces a parallelism between the nearest sides of the grip-blocks when these are sufficiently separated to receive a cable such as C, between their opposed side walls, as shown in Fig. 1, the swinging movement of the grip-blocks being controlled by their connection below the levers with an oval ring *h*.

The ends *d* of the levers A, are perforated to receive the rings *i*, that are also loosely connected with the adjacent ends of two similar link bars D, said link bars being projected toward each other and loosely joined at their other ends by a coupling ring *m*, to which a draft chain E, is attached, said chain (shown only in part) being designed to afford a connection between the improved gripping device and the source of power, or the logs to be drawn, as may be preferred.

If the improved gripping device is utilized to connect the logs to be drawn with a stationary winch apparatus driven by steam, or water power, as at a sawmill to draw the logs onto the latter, the chain E, is attached to the log, and one end of the cable C, is introduced between the grip-blocks B, the main

portion of said cable being extended to engage the winding drum of the stationary mechanism mentioned, so that when the drum is rotated in a proper direction, the cable C, or a chain if this latter is used, when wrapped upon the drum (not shown) will be adapted to transfer the log to the location where it is wanted.

If a traction engine, or a team of draft animals, supplies the draft force for a transportation of one or more logs overland from one point to another, it is preferred to connect the portable engine, or draft animals, to the chain E, and attach one end of the logging chain or cable to the timber which is to be moved, the other end of the chain or cable being clamped between the grip-blocks B, which will adapt the improvement to serve as a convenient intermediary connecting medium for the quick and reliable application of the draft force to the mass which is to be moved.

It will be evident that other large bodies which are to be moved by draft force, may be connected to a source of power by the improved gripping device, if a cable or chain is employed to draw such material.

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

1. In a gripping device for chains or cables, the combination, with two levers loosely connected at one end, and two intervening grip-blocks loosely connected thereto, of two link bars shackled to the other end of the levers and in turn connected together at opposing ends, substantially as described.

2. In a gripping device for chains or cables, the combination, with two levers shackled together at one end, and held divergent at opposite ends, of two intervening grip-blocks held to swing on the inner edges of the levers and transversely thereof, a shackle link between said grip blocks, and two link bars shackled at one end to the divergent ends of the levers and connected together at opposing ends, substantially as described.

3. In a gripping device for chains or cables, the combination, with two divergent levers shackled together at one end, two intervening grip-blocks, V-shaped in cross section, attached transversely upon the inner edges of the levers by swinging joint connections, and a shackle ring connection between said grip-blocks, of two link-bars shackled at one end to the divergent ends of the levers, and loosely connected together at their other ends, substantially as described.

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