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MEANS FOR REMOVABLY ATTACHING LOGS OR THE LIKE TO HAULING TACKLE.

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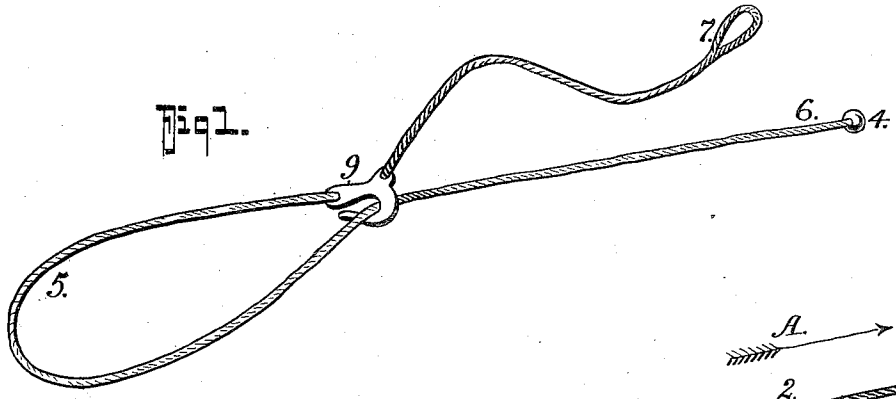
957,297. Patented May 10, 1910.

Fig. 1.



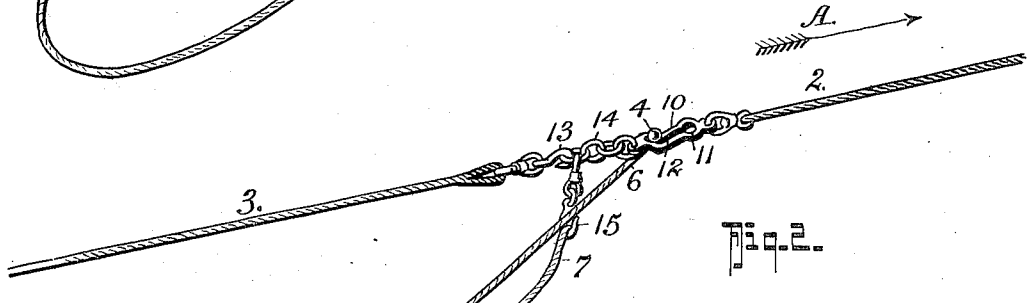


Fig. 2.

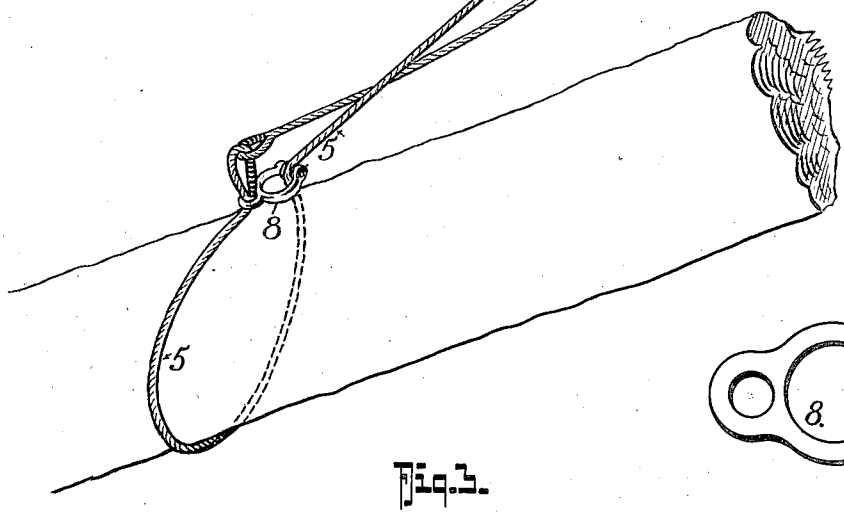


Fig. 4.

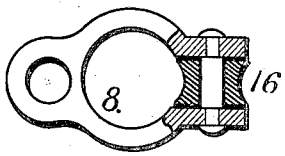


Fig. 3.

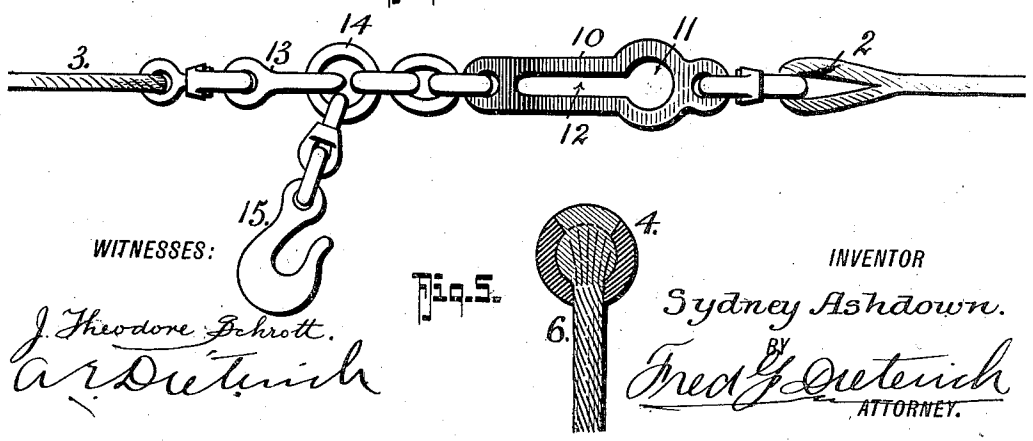


Fig. 5.

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MEANS FOR REMOVABLY ATTACHING LOGS OR THE LIKE TO HAULING-TACKLE.

957,297. Specification of Letters Patent. Patented May 10, 1910.

Application filed May 21, 1909. Serial No. 497,471.

To all whom it may concern:

Be it known that I, SYDNEY ASHDOWN, citizen of the Dominion of Canada, residing at Vancouver, in the Province of British Columbia, Canada, have invented a new and useful Improvement in Means for Removably Attaching Logs or the Like to Hauling-Tackle, of which the following is a specification.

This invention relates to a choker or sling for removably connecting a load to a hauling rope whereby when it is desired to release the load the same can be automatically effected by the backward haul.

The device is particularly designed to facilitate the attachment and release of logs, roots and stumps from the hauling rope in land clearing operations, but is susceptible of application to a variety of purposes where similar conditions prevail.

In land clearing operations on the Pacific coast after the marketable timber has been removed a considerable quantity of deadfalls require to be cleared from the land as well as roots and stumps. These are hauled to a central position and deposited in enormous heaps to be burned, the hauling being effected by a wire rope from a powerful donkey engine, the ropes passing around sheaves at the head of a mast around which the pile is collected. When the load is dragged to the heap the common practice of attachment of the load to the hauling rope by ordinary slings requires the attendance of a man on the heap to release the tackle from the load, an operation which is attended with considerable danger and occupies a considerable amount of time. It is to automatically effect this release when the wire rope is hauled back that the tackle which is the subject of this application has been devised.

The invention is particularly described in the following specification, reference being made to the drawings by which it is accompanied, in which:

Figure 1 is a representation of the sling which is the essential feature of the invention, Fig. 2, shows the application of the same to connect a log to the hauling rope, Fig. 3, an enlarged detail of the link plate by which the hauling end of the sling is automatically released from the hauling rope, Fig. 4, an enlarged detail of the ring by which the loop is formed in the sling, and Fig. 5, an enlarged detail of the ball end of the sling which is released from the hauling rope.

In these drawings 2 represents the hauling rope by which the load is carried to the heap or pile, 3 being a following continuation of the same by which the rope 2 is returned to the place of loading. This haul-back rope 3 may in the case of very heavy hauls be made of a lighter weight rope than 2 as the only work it has to perform is in returning the line.

The load attaching sling which is the subject of this application consists essentially of a length 5 of wire rope having secured on it intermediate of its ends 6 and 7, a ring 8 through which the end 6 of the sling may be passed, and which will thus form a bight or loop around the article which it is desired to attach to the hauling rope 2. The end 7 of the sling by which it is connected to the haul-back 3 and which effects the release of the sling 5 from 2, may be made of a separate length of lighter wire rope for convenience of handling. The end 6 is connected to the hauling rope 2 in any convenient manner that will enable it to release when the hauling rope is pulled back, such as by means of a loop and hook, but is preferably connected in the manner shown in the drawings by a ball formed on the end 6 of the sling which ball is passed through a circular aperture 11 in a link plate 10 connected by the necessary swivels and links to the hauling rope 2 and the haul-back 3. Extending backward from the circular aperture 11 in the plate 10 is an elongated slot 12 that will permit the rope to pass but that will retain the ball, and at the end of this elongated slot 12 the plate is depressed as shown in Fig. 2 to afford a seat for the ball end.

As shown in Fig. 5, the ball end may be formed by a hollow spherical cup 4 within the hollow of which the loose ends of the rope are spread by means of a conical metal wedge, and thereafter Babbitt or other metal is poured in to fill in the interstices of the loose wires. By this means the ball 4 is secured on the end of the sling against movement in either direction.

The haul-back 3 is preferably connected to the link-plate 10 by a hook 13 into a ring 14 connected by a series of links to the link plate 10 and in the same ring 14 is connected by means of a swivel a hook 15 to which the end 7 of the sling 5 may be connected.

In the operation of the device the sling 5 is passed around the log and its ball end 6 is passed through the ring 9 and through the aperture 11 of the link plate 10 and back into the slotted aperture 12 where the ball end is retained as long as movement is in the direction of the haul, indicated by the arrow A, and the end 7 of the sling 5 is connected by the hook 15 to the haul-back 3. The log during the haul is thus securely tightened in the bight or loop of the sling 5, to facilitate the tightening of which a roller 16 may be provided in the ring as shown in Fig. 4. The log having been hauled into place the rope 2 is hauled backward by 3, and the ball end of the sling 5 at 6 falls out of the circular aperture 11 of the link-plate 10 and on further backward movement passes through the ring 8 and clear of the log.

To facilitate the attachment of the sling 5 around a log, a hook 9 as shown in Fig. 1, may be substituted for the ring 8, which hook will be freed from the sling as the line is hauled back, as the end 7 of the sling is connected to an eye formed in the bend of the hook 9.

In action the operation of the hook 9 is practically the same as the ring 8, but although offering advantages in the facility for attachment, is not unfailing in release; and in any case the end 6 should be freed from the hauling line 2 before the sling can be returned, otherwise the log may be drawn from its position in the pile by engagement in the bight of the sling between the ends 6 and 7 if both are connected to 2 and 3.

A simple and effective means is thus provided for effecting the release of an attachment to a hauling rope, by the provision of a sling both ends of which are connected to the hauling tackle, and means for forming a slip or securing loop in that sling so that a pull in one direction will tighten the loop on the object to be hauled while a pull in the opposite direction will release the loop and free the log.

Having now particularly described my invention and the manner of its operation, I hereby declare that what I claim as new and desire to be protected in by Letters Patent, is:

1. As a means for connecting a load to a longitudinally movable hauling rope and for automatically effecting its release therefrom, the combination with the longitudinally movable hauling rope, of a sling, and means for connecting the ends of said sling to said hauling rope, means forming a part of said connecting means for automatically disconnecting one end of said sling from said hauling rope at times, and means intermediate of the ends of said sling for connecting its sides together to form a slip loop.

2. A means for connecting a load to a longitudinally movable hauling rope and for automatically effecting its release therefrom, said means comprising a sling, means connecting one end of the sling to said hauling rope, means removably connecting the other end of said sling to said hauling rope to be automatically disconnected from said hauling rope when said hauling rope is moved in one direction, and to retain connection with said hauling rope when said hauling rope is moved in the opposite direction, means intermediate of the ends of the sling for connecting the two sides of the sling together to form a slip loop in the direction of the haul and to release that connection when the hauling rope is drawn in a given direction.

3. A means for connecting a load to a hauling rope and for automatically effecting its release therefrom, said means comprising the combination with a hauling rope of a sling both ends of which are connected to an adjacent position on the hauling rope, of a hook secured to the sling intermediate of the ends, the eye of the shank of the hook being connected to one length of the sling and the other length of the sling connected to a position adjacent to the bend of the hook.

4. In a device of the class described, the combination of a hauling tackle, of a sling, both ends of which are connected to the hauling tackle, one of said ends being connected to automatically release from the tackle when the hauling tackle is backwardly drawn, and a hook secured to the sling intermediate of the ends, the bend of which hook is secured to the non-releasing end of the sling.

5. In a device of the class described, the combination with the hauling tackle having a ring and a member provided with a key-hole slot, of a sling, one end of which is connected with said ring, and the other end of which is releasably held in said key-hole slot to be automatically released when the hauling tackle is backwardly drawn, and a member secured to the sling intermediate the ends of the bend and releasably engaging the releasable end of the sling.

In testimony whereof I have signed my name to this specification in the presence of the two subscribing witnesses.

SYDNEY ASHDOWN.

Witnesses:
ROULAND BRITTAIN,
CLIVE S. CARMAN.