Sept. 6, 1966 R. A. RATCLIFF 3,271,007

OVER-CENTER LOAD BINDER

Filed Jan. 6, 1965 3 Sheets-Sheet 1

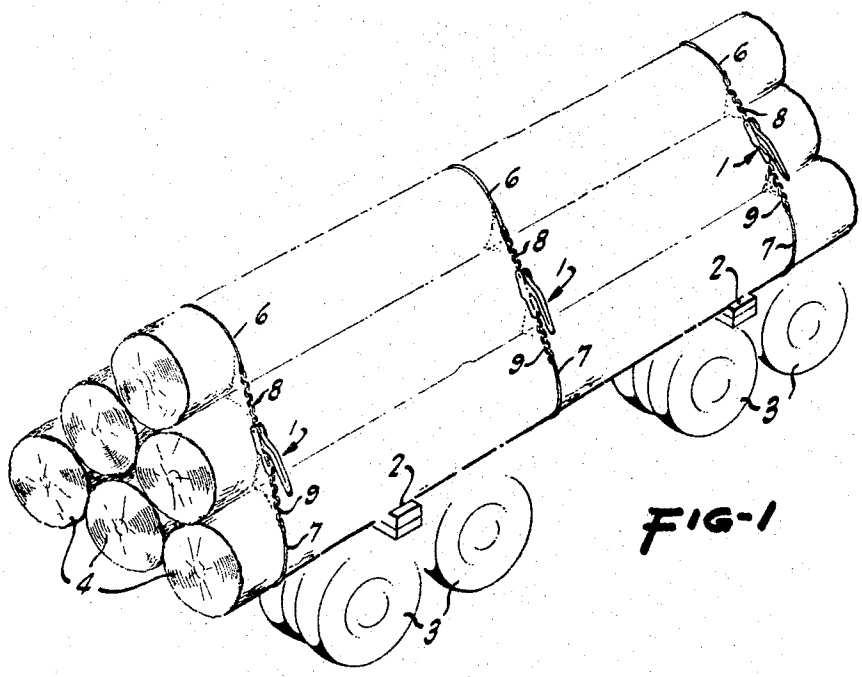

FIG-1

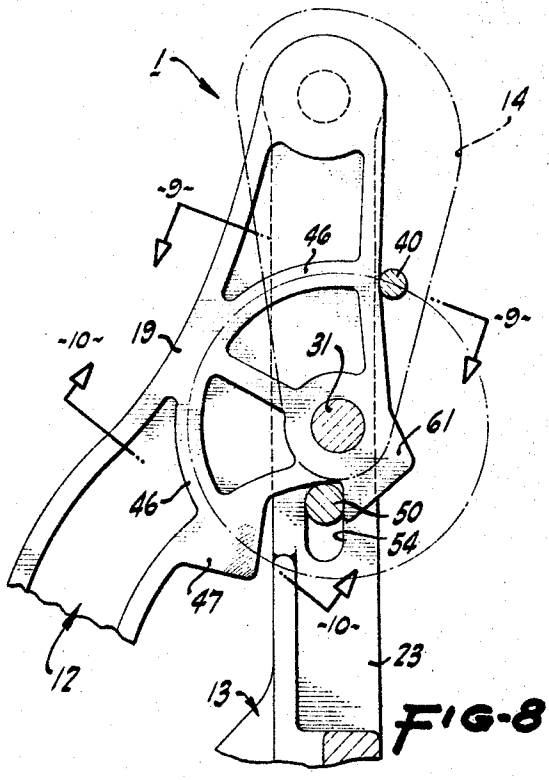

FIG-8

FIG-9

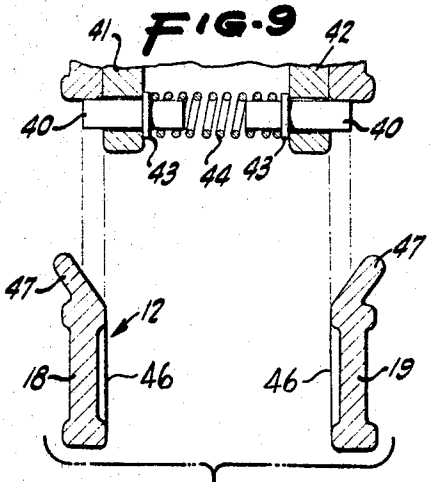

FIG-10

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OVER-CENTER LOAD BINDER

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FIG-2

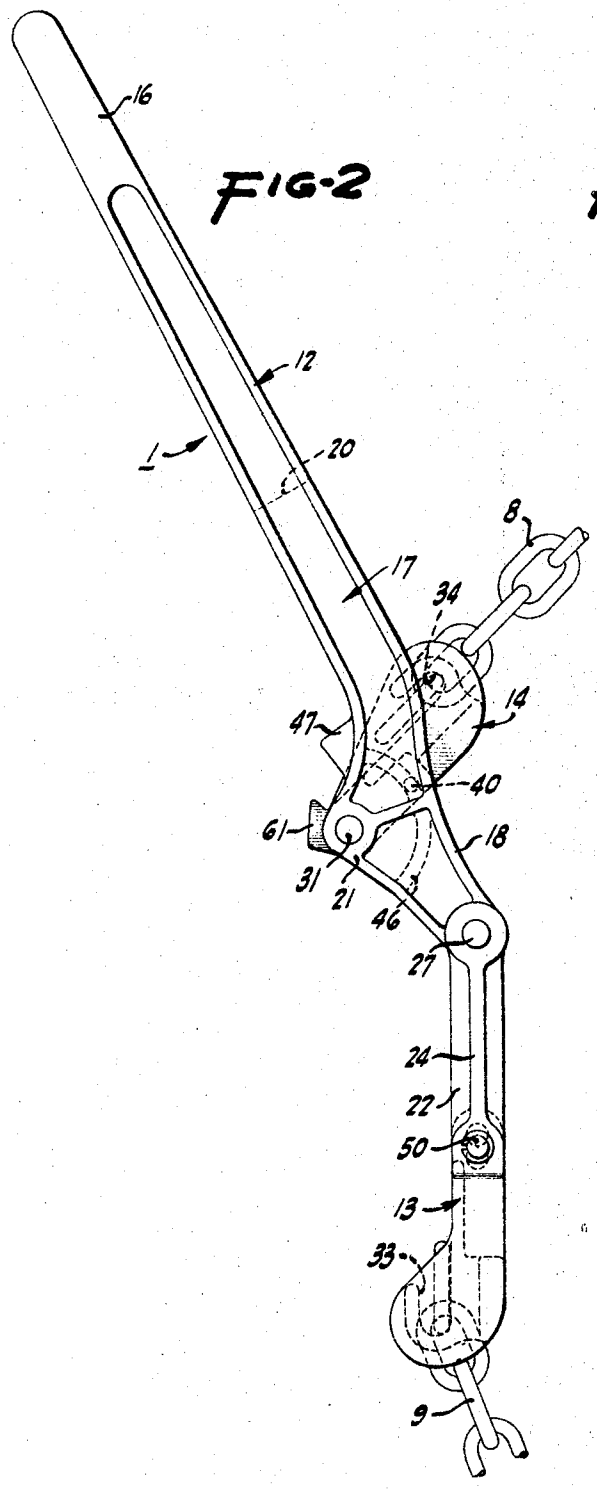
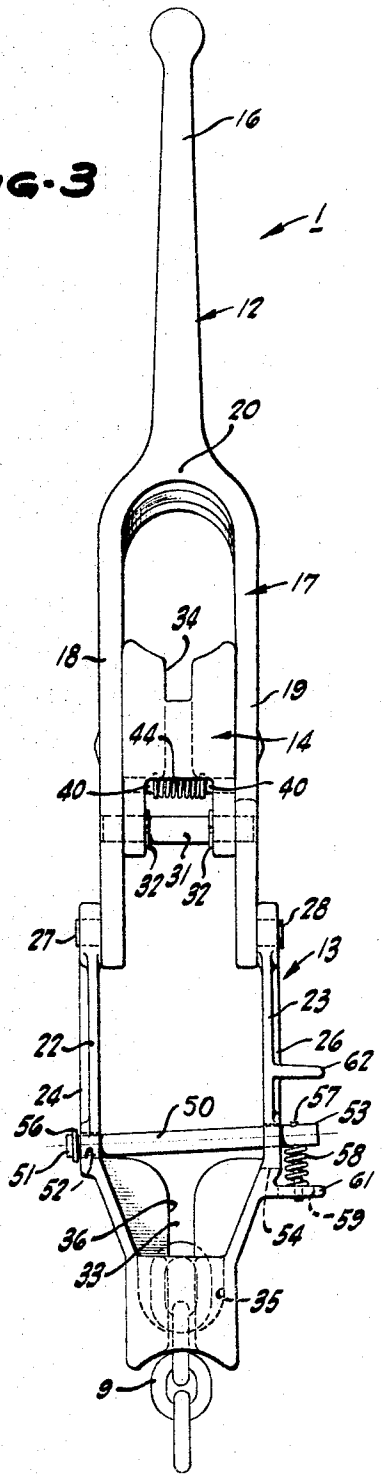


FIG-3



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OVER-CENTER LOAD BINDER

Filed Jan. 6, 1965 3 Sheets-Sheet 3

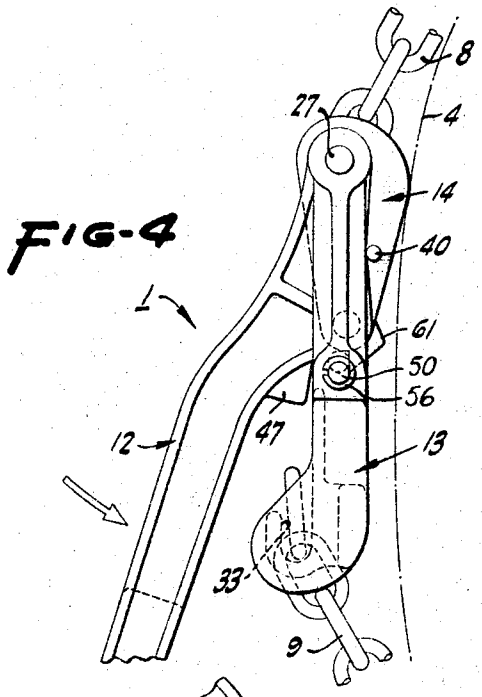

FIG-4

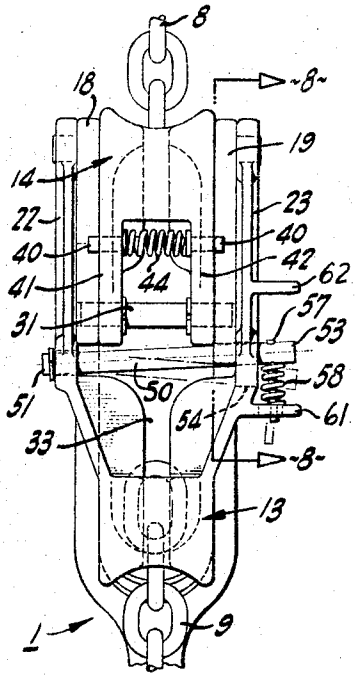

FIG-5

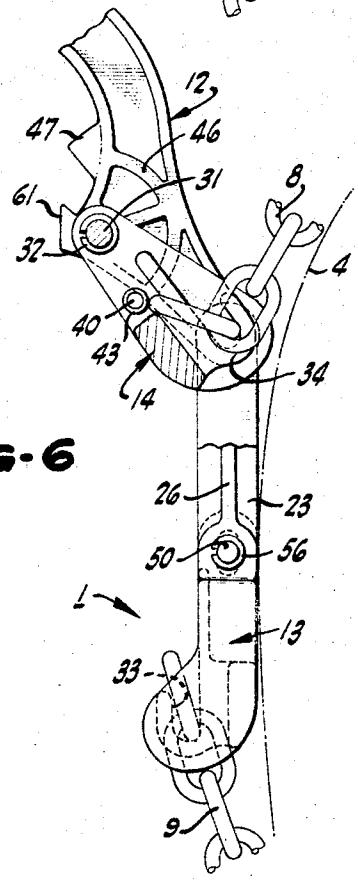

FIG-6

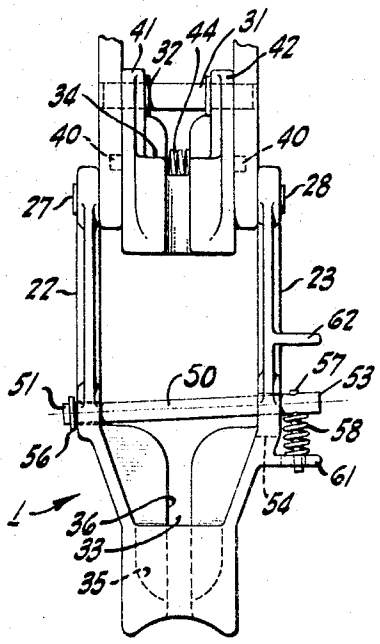

FIG-7

United States Patent Office 3,271,007 Patented Sept. 6, 1966

3,271,007

OVER-CENTER LOAD BINDER

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Filed Jan. 6, 1965, Ser. No. 423,733
14 Claims. (Cl. 254—78)

This invention relates generally to a load sustaining or tensioning device. More particularly, this invention relates to an improved over-center or toggle type load binder intended, among other uses, to bridge the gap between holddown elements positioned around a load on a supporting platform and to apply tension to such holddown elements to preclude the load from shifting.

Still more particularly, this invention relates to a light weight, portable, heavy duty over-center load binder which is extremely compact in construction so that the same may be conveniently employed in close quarters for binding loads of various types, sizes and contours. In this connection, the subject load binder is simple in construction and includes only three principal components, two of which are specifically formed to accommodate holddown elements directly therein without bending, twisting or otherwise deforming the holddown elements.

While reference herein is directed to the subject invention employed for holding a load on a supporting surface, it should of course be understood that its use in other binding or tensioning arrangements for which load binders heretofore or hereafter may be commonly employed also is contemplated. The embodiment disclosed herein is shown in conjunction with securing a given load, such as a plurality of logs, on a transportation vehicle, such as the cradle carriage or platform bed of a logging truck, and the binder is well suited for such usage. The compact construction of the subject binder makes it particularly well suited for use in positions having little access room in which heretofore known bulky binders could be employed only with difficulty, if at all.

The subject binder consists of only three principal operating components, namely a manually graspable operating lever and two compact hook members pivotally connected with the operating lever. It is with the respective hook members that the holddown elements to be tensioned about a load by the load binder are directly engageable. Prior known and commonly employed grab hooks and swivels are omitted completely with the subject binder.

In broad function, the subject binder operates in the same manner as do known over-center load binders. That is, the normal distance between the hook members, when the binder is in its open position, is shortened by moving the operating lever past a dead center position to a closed position in which it generally overlies one of the hook elements. Such movement of the lever draws the two hook members generally towards each other to thereby draw ends of the holddown elements similarly towards each other to apply tension thereto.

The subject binder, however, has a very important distinction and advantage over known over-center binders in that it includes means in conjunction therewith to latch selectively together one of the hook members and the operating lever so that, upon unbinding, the hook member is forced to travel with the operating lever until the holddown element engaged by the hook member is released. This results in generally constant force being maintained on the operating lever during unbinding so that the lever cannot "fly" unrestrained during unbinding. It is such unrestrained "flying" of the operating lever, characteristic of known over-center binders, which frequently results in injury to persons unbinding known binders.

With the subject load binder, during the unbinding operation the load or force on the lever is maintained generally constant due to continued application of tension on

both holddown elements engaged therewith which is insured by the enforced movement of one hook member with the operating lever. Thus, the operating lever is precluded from passing over the dead center position relative to that hook member and any tendency of the lever to "fly" out of the operator's hands is obviated. That is, the latching means of this invention insures that one of the hook members travels with the operating lever until that hook member reaches a position in which the holddown element engaged therewith is freed. Thus, the possibility of the load on the lever being abruptly released is precluded and therefore the danger of the lever flying unrestrained is also precluded.

The subject load binder has another important advantage, namely that the hook members employed therewith require no separate swivels and grab hooks which can impart torsional twisting or bending stresses to the links of chain type holddown elements characteristically employed with load binders to secure a load. The subject load binder employs hook members which are contoured specifically to receive chain links therein in straight line straddling relationship without deforming, twisting or otherwise undesirably stressing the links. Thus, a problem encountered with prior over-center binders which tend to turn sideways against the load being secured, due to the twisting effect of the holddown elements, is obviated.

The subject load binder has the further important advantage that it includes means in its construction for positively and automatically locking the operating lever in the closed load binding position. Such automatic locking means positively holds the operating lever locked until manually released when unbinding is desired. This automatic locking capability not only precludes the danger of the operating lever being accidentally jostled to the open position during transportation, but also minimizes the danger of vandals or other unauthorized persons intentionally releasing the load.

From the foregoing it should be understood that objects of this invention include the provision of a load binding device which is extremely compact, sturdy and highly reliable; the provision of such a device which includes only three principal components and which obviates the need for known swivels and grab hooks in conjunction with the operating lever thereof; the provision of such a device which includes means to preclude the possibility of the operating lever flying unrestrained during an unbinding operation; the provision of a device which includes means to positively lock the operating lever in the closed load binding provision; and the provision of a device which overcomes any tendency to turn sideways when in use. These and other objects will become evident from the following description in which reference is directed to the accompanying drawings for a further understanding of the invention.

FIG. 1 illustrates generally schematically a plurality of the subject load binders employed to bind a load of logs on a transporting vehicle, such as a logging trailer.

FIG. 2 is a side elevational view of the subject binder in the open position showing holddown elements engaged with the hook members thereof.

FIG. 3 is a rear elevational view of the subject binder with one of the holddown elements omitted therefrom for purposes of clarity of illustration.

FIG. 4 is a partial side elevational view of the subject binder closed and locked in the load binding position.

FIG. 5 is a rear elevational view of the closed and locked binder of FIG. 4.

FIG. 6 is a cut away partial side elevational view of the subject binder which illustrates enforced movement of one hook member with the operating lever as the operating lever is moved from the closed position to the open position during an unbinding operation. This figure

shows the respective components of the binder located in the positions which they take just prior to release of a load holddown element by said one hook member.

FIG. 7 is a rear elevational view of the binder components in the position shown in FIG. 6, with the holddown elements omitted for purposes of clarity of illustration.

FIG. 8 is a sectional view taken in the plane of line 8—8 of FIG. 5 illustrating on an enlarged scale details of the automatic locking means for holding the operating lever in the closed position.

FIGS. 9 and 10 are sectional views taken in the planes of line 9—9 and 10—10 respectively of FIG. 8 illustrating details of the latching means which insures travel of one hook member with the operating lever.

Before describing details of the subject over-center load binder, reference is directed to FIG. 1 which shows a plurality of the subject binders, each generally designated 1, exemplarily employed in binding a load in place. In the logging industry, for example, it is common to pile a plurality of freshly cut logs on the cradle platform or flatbed of a trailer chassis to be pulled by a truck or tractor. A suitable supporting platform, defined by spaced cradles 2 located above the wheels 3 of a trailer in known fashion, is illustrated in FIG. 1 and it is upon such a cradle platform that a plurality of logs 4 are stacked in known fashion.

A series of pairs of holddown elements 6 and 7 extend around the load at spaced locations therealong. It is between the adjacent free ends 8 and 9 of these holddown elements that the subject load binders are operatively interposed to bridge the gap between the holddown element ends and to apply tension to the holddown elements when a binder operating lever is moved to its closed position. In some instances ends 8 and 9 of the holddown elements may be part of one continuous element passed completely around the load. In many cases, however, the respective holddown elements 6 and 7 are two discrete elements secured to the transporting vehicle at opposed locations in any suitable and well known manner. In either event, connecting together and applying tension to the adjacent ends 8 and 9 of the respective holddown elements will secure the load against shifting during movement.

The illustrated holddown elements are defined by lengths of flexible wire cable which have, at their ends 8 and 9, lengths of coil chain secured thereto. Of course, the holddown elements may be, and frequently are, defined entirely by coil chain links for their full lengths.

The subject over-center load binder is defined by only three principal operating components, and heretofore used grab hooks and swivels are not included in its construction. Referring to FIGS. 2 and 3, the binder comprises an elongated operating lever 12 which is movable between a load releasing open position and the aforementioned load binding closed position. The other two components of the subject binder comprise a first or bottom hook member 13 and a second or top hook member 14.

The operating lever has at one end 16 thereof a manually graspable handle portion and at its other end 17 a clevis portion defined by a pair of laterally spaced arms 18 and 19 joined with each other and with the handle portion at a location 20 generally intermediate opposite ends of the lever as perhaps best seen in FIG. 3. To minimize weight without restricting strength of the operating lever, through the major extent of its handle portion and into and through its clevis portion, the lever is formed with a recessed channel construction.

Each of the clevis arms 18 and 19 includes an offset eccentric portion 21 which imparts a generally "dog leg" configuration to the lever as seen in FIG. 2. It is such an offset dog leg configuration, characteristic of this and other over-center load binders, which permits such a binder to operate in toggle fashion to draw holddown elements engaged therewith towards each other for applying tension thereto.

Bottom hook member 13 is generally U-shaped and is defined by a pair of laterally spaced arms 22 and 23, which are provided with reinforcing ribs 24 and 26 extending therealong, as seen in FIGS. 2 and 3. Hook member 13 is pivotally connected adjacent the end of the operating lever clevis in straddling relationship with respect to the arms 18 and 19 thereof by means of a pair of stub pivot shafts 27 and 28 integral with and projecting outwardly from the clevis arms into appropriate bores provided in the hook member arms. Thus hook member 13 is securely yet pivotally connected with the operating lever. As is described in greater detail later, the free end of hook member 13 is defined by a portion thereof specifically contoured to receive directly therein links of a chain holddown element. The top hook member 14 also is generally U-shaped and is also pivotally connected with the operating lever. In this regard, the offset portions 21 of the clevis arms 18 and 19 are apertured to receive therein a pivot pin 31 extending transversely therebetween. It is upon pin 31 that hook 14 is pivotally mounted between the arms of the clevis portion. As seen in FIGS. 2 and 3, hook member 14 may pivot through a complete circle between the arms of the lever clevis portion and the arms of hook member 13. As is also seen in FIG. 3, pivot pin 31 upon which hook member 14 is mounted is precluded from lateral movement by a pair of split rings 32 received in appropriate grooves provided in the pin. Hook member 14 also has at its free end a portion specifically contoured to receive directly therein links of a chain holddown element.

Each of hook members 13 and 14 is of rigid one piece construction and each is provided with an integral chain receiving recess formed directly therein. The chain receiving recess of bottom hook member 13 is generally designated 33 while the chain receiving recess of top hook member 14 is generally designated 34. Those chain receiving recesses are substantially identical in configuration and hereinafter reference is directed specifically to recess 33 of the bottom hook member 13 but such reference is equally applicable to recess 34 in the top hook member.

Such recess is defined by a pair of angularly related communicating channel portions 35 and 36 (see FIGS. 3 and 7) each of which extends generally longitudinally of the hook member. The respective channel portions are arranged generally at 90° relative to each other to receive therein two adjacent links of coil chain to be engaged thereby. In this regard, note FIGS. 2 and 3. Thus, tension is applied by each hook member substantially directly in line with the axis of the coil chain so that no twisting, bending or other distorting stresses are applied to the chain links. That is, the respective hook members straddle the chain links engaged therewith without twisting the same in the fashion heretofore commonly encountered with load binders employing grab hooks and swivel arrangements of known type.

It is this straddle engagement of the hook members of the subject binder with chain links of the holddown elements which obviates the problem encountered with heretofore known over-center load binders to twist or turn sideways when engaged with a load. Such sideways turning in heretofore known binders is attributable to the twisting moments applied to the holddown elements by the grab hooks and swivel arrangements commonly employed therewith. If over-center binders turn sideways when in the closed position, it is frequently difficult and sometimes impossible to grasp their operating levers to release the same during a load unbinding operation. However, referring to FIG. 1, with the subject device in which such tendency to twist and turn sideways is obviated, the operating lever thereof is readily accessible for ease of unbinding.

While in the drawings the last two links of chain holddown elements have been shown engaged with the respective hook members of the binder, it should be understood,

of course, that any chain links intermediate the ends thereof also may be easily engaged by the hook members. Any excess chain links encountered may merely be positioned to one side or folded back out of the way of the operating parts when the binder is utilized.

The latching means which precludes the operating lever from flying without restriction when the binder is moved from the closed position (FIGS. 4 and 5) back to the open position (FIGS. 2 and 3) generally comprises spring urged mechanism carried by the top hook member **14**. Such spring urged mechanism is automatically engageable with a predetermined portion of the operating lever when the lever is moved to its closed position. In this regard, the illustrated latching means includes spring urged mechanism defined by at least one and preferably two latching pins **40**, perhaps best seen in FIGS. 3, 4, 5 and 9. These latching pins are carried by top hook member **14** in recesses provided in opposite arms **41** and **42** thereof (see FIG. 9). Latching pins **40** normally project laterally outwardly beyond arms **41** and **42** as shown in FIGS. 5 and 9 and their outward travel is limited by enlarged collars **43** provided thereon. In the illustrated embodiment a coil spring **44** is interposed between the respective pins and urges the same laterally outwardly to the normal position shown in FIGS. 5 and 9.

The latching pins, when the binder is positioned to receive holddown elements prior to binding thereof, are held depressed between the spaced arms **18** and **19** of the clevis portion of the operating lever as shown in FIGS. 2 and 3. To this end, each of the arms of the clevis portion is provided on its internal surface with an arcuate rib **46** over which the respective latching pins ride during relative pivotal movement between the top hook member **14** and the operating lever.

It should be understood that the latching pins, when the operating lever is moved to its closed position, engage a predetermined position of the operating lever to thereafter preclude movement of the operating handle without producing attendant movement of the top hook member **14** therewith. That is, when the operating lever is moved from the open position shown in FIG. 2 to the closed position shown in FIGS. 4 and 8, the latching pins **40** ride on the arcuate ribs **46** until they reach the ends of those ribs, at which time they are spring urged outwardly into engagement with edge portions of the respective arms **18** and **19** of the clevis portion of the operating lever. This position of the latching pins relative to the clevis arms is best shown in FIGS. 4, 5 and 9. When the latching pins are thus engaged with the outer edge portions of the clevis arms, movement of the operating lever from the closed position shown in FIG. 4, for example, towards the open position automatically and necessarily produces attendant movement of the top hook member **14** therewith. This condtion is shown for example in FIGS. 6 and 7.

In this regard, the showing in FIG. 6 illustrates generally the relative position of the top hook member **14** and operating lever relative to the bottom hook member **13** at the time when the coil chain links which define the end of the holddown element are about to be released by the top hook member. Up until the actual moment of release, however, due to the enforced movement of the top hook member with the operating lever, the force applied to the lever by the operator in unbinding the load has remained generally constant and the tendency of the lever to fly out of the operator's hands has been obviated in that the lever does not move past the dead center position relative to the top hook **14** during unbinding. Thus, while in practical effect the subject load binder, during unbinding, releases the chain holddown element relatively abruptly, that condition is preferred over abrupt flying of the operating lever.

The binder includes a further improvement in conjunction with the latching means which permits the top hook member **14**, after load release, to be easily positioned in the operative location shown in FIG. 2 for again binding a load. Referring to FIGS. 8, 9 and 10, each of the arms of the lever clevis portion includes a deflecting ear **47** which extends laterally outwardly relative to an associated arm. The deflecting ears diverge relative to each other as seen in FIG. 10. Such deflecting ears are positioned at one end of the arcuate ribs **46** in line with the latching pins **40** when the top hook member **14** is pivoted, following disengagement of chain **8**, in the clockwise direction from the position viewed in FIG. 6. Thus, when the latching pins reach and strike the deflecting ears, the pins are automatically depressed inwardly of hook member **14**. Upon continued pivotal movement of hook member **14**, the latching pins ride over the arcuate ribs **46** provided on the respective arms of the clevis portion of the lever. Thus, it is readily possible, by moving the hook member **14** in a clockwise direction when viewed in FIGS. 2 and 6, to automatically reposition the hook member **14** for reengagement with links of a holddown element. The circular path through which latching pins **40** may pass relative to the operating lever and the deflecting ears **47** carried thereby as hook member **14** is pivoted is shown by the dot-dash line in FIG. 8.

The subject load binder further includes means for locking the operating lever in the closed position shown in FIGS. 4 and 8 in which it generally overlies the bottom hook member **13**. Such locking means is manually releasable to permit unbinding of the load as required. In the embodiment illustrated, the locking means comprises a spring urged movable trigger **50** extending transversely of bottom hook member between the opposed arms thereof. Trigger **50** at one of its ends **51** is loosely received in a bore **52** provided in arm **22** of the hook member. At its opposite end **53**, trigger **50** extends through an elongated slot **54** in the opposite arm **23** of hook member **13**. A split ring **56** is engaged with end **51** of the trigger and precludes movement thereof to the right as seen in FIG. 3. A projecting pin and spring assembly **57**, **58** precludes movement of the trigger to the left as viewed in FIG. 3.

Pin **57** is fixedly secured in the trigger and extends therefrom through a slot **59** (FIG. 3) provided in a projecting flange **61** which extends laterally of arm **23** of hook member **13**. A similar flange **62** is spaced from flange **61** and cooperates therewith in protecting the depressible end **53** of the trigger during use of the load binder.

As shown in FIG. 5, when trigger **50** is depressed by urging end **53** thereof toward flange **61** against the urging of spring **58**, the trigger may move within slot **54** to the dotted line position shown in FIG. 5. It is when the trigger is in that depressed position that the operating lever of the binder may be released from its closed and locked position.

Cooperating with the trigger is a locking ear **61** formed on and projecting from arm **19** of the clevis portion of the operating lever. As best seen in FIG. 8, when the operating lever is moved to the fully closed position, trigger **50** rides over locking ear **61** and automatically snaps into engagement therebehind. Thus, when the trigger and locking ear **61** are engaged as shown in FIG. 8, clockwise movement of the lever from the closed position shown in that figure towards the open position is positively precluded. However, upon depressing movable end **53** of the trigger, disengagement of the locking ear from the trigger may be easily effected and the operating lever is then free to be moved toward the open position to permit load unbinding.

The locking means thus insures positive locking and precludes accidental unbinding of a load secured by the subject binder while incorporating those advantages in a readily accessible and easily operable locking mechanism.

Having thus made a full disclosure of this invention reference is directed to the appended claims for the scope of protection to be afforded thereto.

1. A load binder comprising: an elongated operating lever movable between a load binding closed position and a load releasing open position, said lever being defined by a graspable handle portion and a clevis portion integral with said handle portion; a first hook member pivotally connected with said clevis portion adjacent an end thereof; a second hook member pivotally connected with said clevis portion inwardly of said clevis end; and automatically engageable latching means provided between said clevis portion and said second hook member, said latching means becoming automatically engaged when said operating lever is moved from said open position to said closed position during a load binding operation, said latching means thereafter insuring movement of said second hook member with said lever as said lever is moved from said closed position toward said open position during a load releasing operation whereby unrestrained motion of said operating lever during such load releasing movement thereof is precluded.

2. The load binder of claim 1 in which said latching means is carried by said second hook member and comprises a spring urged latching pin normally projecting laterally from said second hook member, said latching pin being automatically engageable with an edge of said clevis portion when said lever is moved to said closed position from said open position during a load binding operation.

3. The load binder of claim 1 which includes manually releasable automatic locking means provided between said clevis portion and said first hook member, said clevis portion generally overlying said first hook member when said lever is in said closed position, said locking means positively maintaining said lever in said closed position until said locking means is released to permit movement of said lever toward said open position.

4. The load binder of claim 3 in which said locking means comprises a manually releasable spring urged trigger mounted on said first hook member, and a projecting ear on said clevis portion engageable by said trigger when said lever is in said closed position, said trigger automatically engaging said ear when said lever is moved from said open position to said closed position.

5. An over center load binder comprising: an elongated operating lever defined by a graspable handle portion and a clevis portion integral with said handle portion, said clevis portion comprising a pair of laterally spaced arms joined with each other and with said handle portion between opposite ends of said lever, said arms each including an offset portion which imparts a dog leg configuration to said lever; a rigid one piece first hook member connected with said lever at an end thereof defined by free ends of said spaced arms, said first hook member straddling said arms and being pivotally connected therewith at their said free ends; a rigid one piece second hook member connected with said lever generally in line with said offset portions of said arms, said second hook member being pivotally connected with and positioned between said arms; each of said hook members having formed therein a chain receiving recess adapting each said hook member to accommodate a chain link directly therein, whereby said load binder may be interposed between opposed lengths of chain to which tension is to be applied by said binder, such tension being applied when said lever is moved from an open position to a closed position in which said lever generally overlies said first hook member; and automatic latching means for insuring movement of said second hook member with said lever when said lever is moved from said closed position toward said open position, said latching means comprising at least one spring urged latching pin carried by and normally projecting laterally from a side surface of said second hook member, a projecting end of said latching pin being engaged with an edge of a clevis arm when said lever is in said closed position, such engagement between said latching pin and said clevis arm causing movement of said second hook member with said lever as said lever is moved from said closed position toward said open position.

6. The load binder of claim 5 which includes automatic locking means for releasably maintaining said lever in said closed position; said locking means comprising a projecting ear on one of said clevis arms adjacent said offset portion thereof, and a spring urged trigger carried by said first hook member, said trigger automatically engaging said projecting ear when said lever is moved to said closed position and thereafter precluding movement of said lever from such closed position so long as said trigger and ear are thus engaged, said trigger being manually disengageable from said ear so that said lever may be moved from said closed position toward said open position.

7. In an over center load binder which comprises an elongated operating lever movable between a load binding closed position and a load releasing open position, said lever including a graspable handle portion and a clevis portion defined by laterally spaced arms integral with said handle portion, a first hook member pivotally connected directly with said clevis portion adjacent an end thereof, a second hook member pivotally connected directly with said clevis portion inwardly of said end between said arms, and automatic latching means provided between clevis portion and said second hook member for insuring movement of said second hook member with said lever as said lever is moved from said closed position toward said open position during a load releasing operation; said latching means comprising a pair of spring urged latching pins normally projecting laterally in opposite directions from said second hook member, said latching pins being engageable with edges of said clevis arms when said lever is in said closed position, such engagement between said latching pins and said clevis arms causing said second hook member to move with said lever as said lever is moved from said closed position.

8. The load binder of claim 7 in which each of said hook members has a chain receiving recess formed directly therein, each said recess being defined by a pair of angularly related communicating channel portions, said channel portions adapting each recess to receive two adjacent links of a coil chain therein without distorting or twisting such chain links.

9. The load binder of claim 7 which includes automatic locking means for positively yet releasably maintaining said lever in said closed position; said locking means comprising a spring urged trigger mounted on said first hook member, and a projecting ear on said clevis portion engageable by said trigger when said lever is in said closed position, said trigger automatically engaging said ear when said lever is moved from said open position to said closed position and maintaining said lever in said closed position until said trigger is manually actuated to disengage the same from said ear.

10. An over center load binder comprising: an elongated operating lever defined by a graspable handle portion and a clevis portion integral with said handle portion, said clevis portion comprising a pair of laterally spaced arms joined with each other and with said handle portion between opposite ends of said lever, said arms each including an offset portion which imparts a dog leg configuration to said lever; a rigid first hook member connected with said lever at an end thereof defined by free ends of said spaced arms, said first hook member straddling said arms and being pivotally connected therewith at their said free ends; a rigid second hook member connected with said lever generally in line with said offset portions of said arms, said second hook member being pivotally connected with and positioned between said arms; said hook members adapting said load binder to be interposed between and grasp opposed lengths of chain and to apply tension to such lengths of chain when said lever is moved from an open position to a closed

position in which said lever generally overlies said first hook member; and automatic locking means for releasably maintaining said lever in said closed position; said locking means comprising a projecting ear on one of said clevis arms adjacent the offset portion thereof, and a spring urged trigger carried by said first hook member, said trigger automatically engaging said projecting ear when said lever is moved to said closed position, movement of said lever from said closed position being positively precluded so long as said trigger and said ear are thus engaged, said trigger being manually disengageable from said ear so that said lever may be moved from said closed position toward said open position.

11. The load binder of claim **10** which includes latching means for insuring movement of said second hook member with said lever when said lever is moved from said closed position toward said open position; said latching means comprising spring urged mechanism carried by said second hook member and pivotal therewith, said mechanism being engageable with a predetermined portion of said clevis when said lever is in said closed position, such engagement precluding movement of said lever from said closed position without accompanying movement of said second hook member.

12. A load binder comprising: an operating lever movable between a load binding closed position and a load releasing open position; a first hook member pivotally connected with said lever adjacent an end thereof; a second hook member pivotally connected with said lever inwardly of said end thereof; and latching means provided between said lever and said second hook member for insuring movement of said second hook member with said lever when said lever is moved from said closed position toward said open position during a load releasing operation, said latching means including spring urged mechanism carried by said second hook member which is automatically engageable with a predetermined portion of said lever when said lever is moved to said closed position.

13. The load binder of claim **12** in which said spring urged mechanism of said latching means comprises at least one latching pin movably mounted on said second hook member, said latching pin extending laterally of said second hook member and normally projecting therefrom for engagement with said predetermined portion of said lever, and a spring engaged with each such latching pin normally urging such pin toward its projecting position.

14. The load binder of claim **13** which includes a deflecting ear on said lever in line with each latching pin, the number of such deflecting ears corresponding to the number of said latching pins, each such deflecting ear automatically depressing an associated latching pin into said second hook member against the urging of such spring when said second hook member is pivoted about its pivotal connection to bring such latching pin into alignment with such deflecting ear.

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