No. 747,079. PATENTED DEC. 15, 1903.

W. E. MARTIN.

COMBINED CANT HOOK AND BINDER.

APPLICATION FILED JULY 31, 1903.

NO MODEL.

Fig. 1.

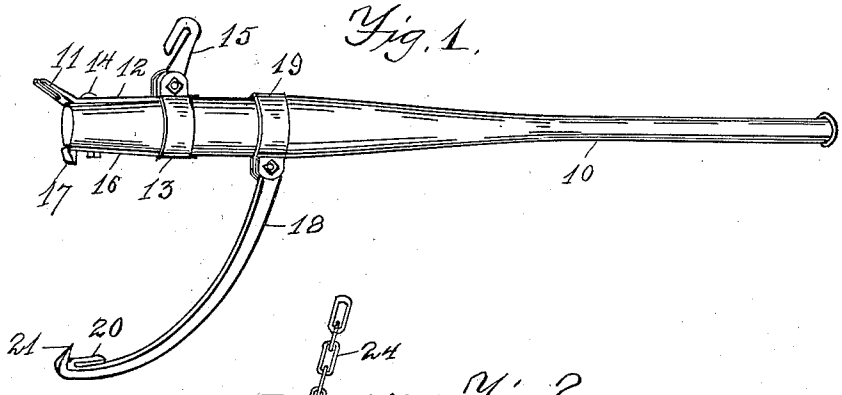


Fig. 2.

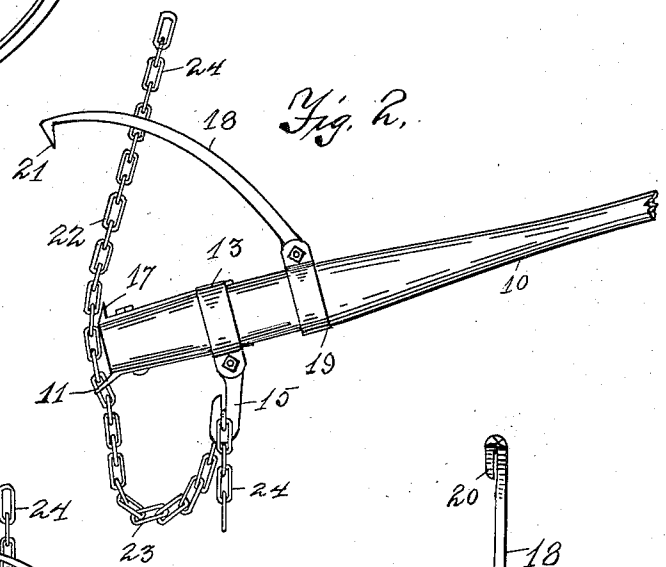


Fig. 3.

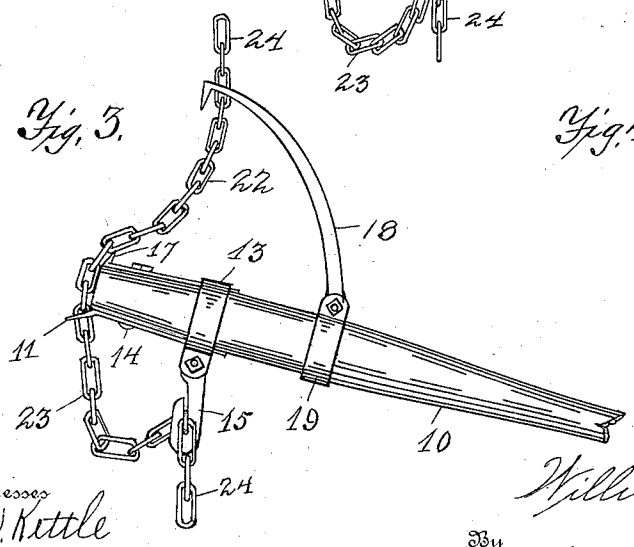
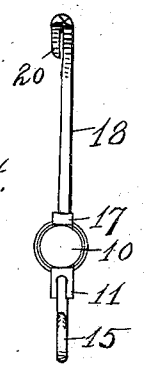


Fig. 4.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 747,079. Patented December 15, 1903.

UNITED STATES PATENT OFFICE.

WILLIAM E. MARTIN, OF JAMESTOWN, NEW YORK, ASSIGNOR OF ONE-HALF TO CHARLES F. SAGERDAHL, OF JAMESTOWN, NEW YORK.

COMBINED CANT-HOOK AND BINDER.

SPECIFICATION forming part of Letters Patent No. 747,079, dated December 15, 1903.

Application filed July 31, 1903. Serial No. 167,712. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. MARTIN, a citizen of the United States, residing at Jamestown, in the county of Chautauqua and State of New York, have invented a new and useful Combined Cant-Hook and Binder, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to a tool for handling logs and for binding the logs after loading the same, the binding-tool being adapted to facilitate the taking up of the slack of the chain in binding the load. It is necessary to be able to take up a large amount of slack in the chain ofttimes in binding a load. Especially is this true in binding loads of hay, straw, or grain, which have a bulky capacity which needs great power to draw up the chain. My tool is adapted to accomplish this purpose.

My improvements consist in the adaptation of a common cant-hook by the addition of a chain-hook on the side of the cant-hook, a slotted claw on the end of the cant-hook lever or handle, and an extra chain-hook between the cant-hook and the claw, so that a leverage can be obtained on the chain from one to another of these three places for engaging the chain, and so that while two are holding the chain the third may be reëngaged, so as to take up more of the chain with each movement of the cant-hook handle back and forth. My binder will thus be made to advance as many times on the chain as is desired and with so great a leverage from the cant-hook handle as to overcome all obstacles.

In the drawings, Figure 1 is a perspective view of my cant-hook and binder. Fig. 2 is a side elevation of the same attached to a chain with the handle raised in the position of release for the cant-hook as to the chain. Fig. 3 is a side elevation with the handle depressed, drawing the chain between the two hooks and releasing it from the claw. Fig. 4 is an end view of my cant-hook and binder, showing the slotted claw on the end of the handle.

Similar numerals refer to similar parts in the several views.

The numeral 10 is the handle, which is made of the desired size and length and of suitable timber to stand a heavy strain. The handle 10 has the slotted claw or projection 11, bent at an angle from the metal strip 12, which piece 12 is secured to the handle under a metal clasp 13 and by a bolt 14 through the handle. Metal clasp 13 also pivotally supports a chain-hook 15 and binds the inner end of a similar piece 16 to piece 12, which has a sharp-turned spur 17 for engaging the log or timber and insuring the hold of the cant-hook. Bolt 14 also extends through piece 16.

Cant-hook 18 is pivotally attached to the handle 10 by a clasp 19, similar to clasp 13 and hook 15 and in the rear of clasp 13, so as to obtain a leverage between the two hooks when engaging the chain. Cant-hook 18 is made similar to the common cant-hook with a spur 21 at its outer end, except that a hook 20 is made at the side of the cant-hook near its outer end for engaging the chain. This arrangement furnishes three points at which the chain is engaged in the operation of binding a load—the chain-hook 15, slotted spur 11, and the hook 20.

My tool is used as a cant-hook in the common manner and serves the general purpose for such a tool about the farm. In using the tool in connection with the binding-chain 22 it is turned the other side up from its use as a cant-hook, the hook 18 being on the upper side. The binding-chain 22 is engaged by hook 15, which forms the fulcrum for the lever or handle 10, and the chain does not have to be removed from hook 15. The chain is then engaged by the slotted claw 11 with the handle in the downward position, as in Fig. 3, and the raise of the handle will cause the chain to become slack between claw 11 and hook 15, as at 23. Hook 20 on cant-hook 18 then engages the chain as high as possible, and the handle is then brought down in the position shown in Fig. 3, making the chain slack both above and below claw 11, enabling chain to be straightened above claw 11, keeping the slack all between the hook 15 and claw 11. The handle 10 is again raised, throwing the cant-hook 18 forward, as in Fig. 2, after which the cant-hook can be again ad-

vanced along the chain. It is apparent that by this alternate engaging of the chain at claw 11 and hook 20 while it is held by hook 15 the operator can advance along the chain and with power commensurate to bind any load. In fact, it is found that care must be exercised in binding loads of hay, straw, and grain not to break the rack by the immense strain which can be exerted upon it with the leverage of a common cant-hook handle.

When it is desired to only bind one load, my binder may be left in place and will lock the chain firmly in position. Should it be desired, however, to consecutively bind a number of loads, a binding-chain with a toggle end long enough to reach from link 24 below the binder to link 24 above the binder is used, and when the chain has been taken up sufficiently an extra draw is given to the chain and the toggle end is hooked into place, thus securely binding the load, so that the binder may be removed. Chains having toggle ends are not common, and I sometimes supply what I call a "locking-chain" for consecutively binding loads with my binder. This consists of a short piece of chain, usually about two and one-half feet long, with a chain-hook on each end of it for extending from link 24 below to link 24 above the binder and locking the binding-chain.

It is obvious that hook 15 might be unpivoted; also, that hooks 15 and 20 could be attached at equal instead of unequal distances from claw 11 on handle 10 and yet attain my purpose. I prefer my tool as shown, however, on account of the greater convenience and celerity in handling the same.

I claim as new—

1. A binding-tool composed of a lever or handle, a claw on the end of the lever for engaging a chain, and fulcrum-hooks on opposite sides of said lever for engaging the binding-chain in conjunction with said claw and lever.

2. A binding-tool composed of a lever or handle, a claw on the end of the lever for engaging a chain, and fulcrum-hooks for said lever pivotally attached to its opposite sides at unequal distances from said claw.

3. In a tool, the combination of a cant-hook, a chain-engaging claw on the end of the cant-hook handle, a chain-hook on the opposite side of said handle from the cant-hook, and a chain-hook on the side of the cant-hook, substantially as shown.

4. A combined cant-hook and binder composed of a handle 10, a claw 11 on the end of said handle for engaging chain-links, a cant-hook 18 pivotally attached to said handle having a chain-hook 20 near its outer end, and a chain-hook 15 pivotally attached to said handle between said claw and cant-hook.

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

WILLIAM E. MARTIN.

In presence of—
A. L. FURLOW,
S. A. BALDWIN.