

A. SANFORD.
Ferrule for Cant-Hooks.

No. 220,093.

Patented Sept. 30, 1879.

Fig. 1.

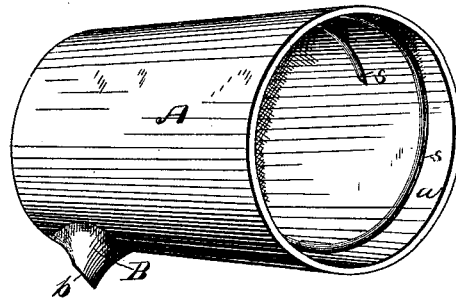


Fig. 2.

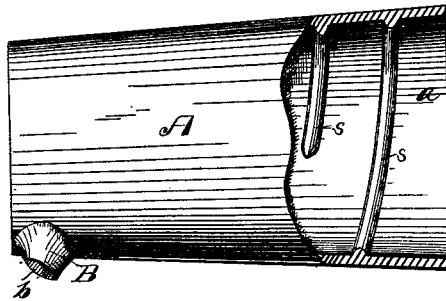
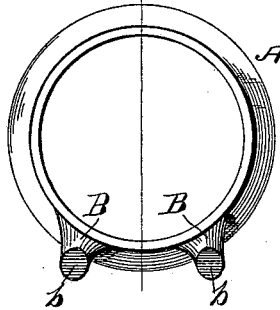


Fig. 3.



Attest

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UNITED STATES PATENT OFFICE.

ALBERT SANFORD, OF OSHKOSH, WISCONSIN.

IMPROVEMENT IN FERRULES FOR CANT-HOOKS.

Specification forming part of Letters Patent No. **220,093**, dated September 30, 1879; application filed August 4, 1879.

To all whom it may concern:

Be it known that I, ALBERT SANFORD, of Oshkosh, in the county of Winnebago and State of Wisconsin, have invented a certain new and Improved Ferrule for Cant-Hooks and other Implements; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a side view; and Fig. 3 an end view.

Similar letters of reference in the several figures denote the same parts.

My invention has for its object to provide an improved ferrule or toe-ring for cant-hooks and other implements, which shall be less liable to become pulled off or detached than those at present in use; and to this end it consists, primarily, in providing the ferrule with projections or horns near its lower end for co-operating with the hook in grasping the log, said projections or horns being located on opposite sides of a vertical line drawn longitudinally through the center of the ferrule, so as to prevent the implement from turning or rolling when in use.

It further consists in setting said projections or horns at an angle with the side of the ferrule, and beveling their ends so as to form sharp edges that will readily dig into the log when co-operating with the hook, the beveling serving the further purpose of preventing the catching and holding of the horns when the implement is moved forward endwise; and it consists, lastly, in the ferrule as a whole, constructed as I will now proceed to describe.

In the drawings, A represents the body of the ferrule, constructed, preferably, of a malleable casting, and of the usual conical form, as shown.

The upper part of the ferrule is provided with internal-projecting screw-threads *s*, the uppermost of which terminates about a quarter or half an inch from the end of the ferrule, so that when the ferrule is screwed onto the staff there will be from a quarter to a half inch of plain surface, *a*, between the uppermost thread and the end.

Were the threads continued way to the end of the ferrule, the compression of the fibers of the wood by the last thread would weaken the staff and render it liable to be broken at that point; but by leaving the plain smooth portion *a* from the last thread to the end, the

staff is supported both above and below the weak point, and the danger of breakage prevented.

The threads are preferably made round, so that they will crush or compress the wood rather than cut it, and thus secure a better hold and render it more difficult for the ferrule to be pulled off.

Near the lower extremity of the ferrule are formed two projections or horns, B B, the same being located some distance apart and on opposite sides of a vertical line drawn longitudinally through the center of the casting, as clearly shown in Fig. 3. These projections or horns are slightly inclined toward the lower end of the casting, as shown, and they are beveled off on their ends, at *b*, for a double purpose—first, to form sharp edges for readily penetrating the log when co-operating with the hook; and, secondly, to prevent the horns from catching and holding against such obstacles as they may come in contact with when the implement is moved forward endwise.

The horns lie on opposite sides of the plane in which the hook moves, and they therefore take hold firmly upon the log when co-operating with the hook, and prevent the implement from turning on its bearing-points.

A ferrule constructed similar to the one shown, except that the projections or horns are omitted, may be used to advantage upon a variety of implements, such as pikes, rakes, hoes, &c.

I claim as my invention—

1. A ferrule or toe-ring for cant-hooks provided with holding projections or horns on opposite sides of a vertical line drawn longitudinally through its center, or, in other words, upon opposite sides of the plane in which the hook moves, substantially as described.

2. A ferrule or toe-ring for cant-hooks provided with the inclined holding projections or horns having beveled ends, substantially as described, for the purpose specified.

3. The ferrule or toe-ring A, having the internal screw-threads and the inclined and beveled horns or projections B B, all cast in one piece, substantially as described.

ALBERT SANFORD.

Witnesses:

W. BLACKSTOCK,
M. CHURCH.