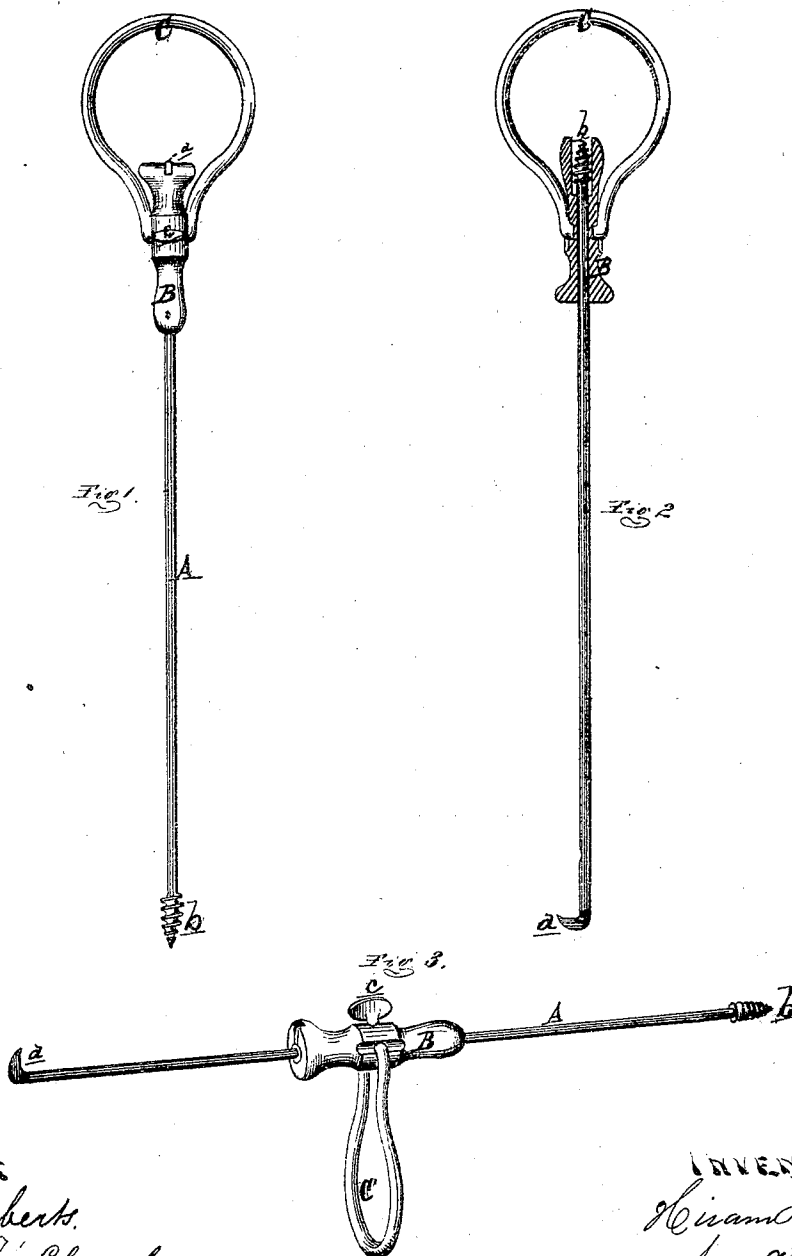


HIRAM N. SMADE.

Improvement in Instruments for Extracting Packing from Stuffing Boxes.

No. 118,823.

Patented Sep. 12, 1871.



ATTEST
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HIRAM N. SMADE, OF MANISTEE, MICHIGAN.

IMPROVEMENT IN INSTRUMENTS FOR EXTRACTING PACKINGS FROM STUFFING-BOXES.

Specification forming part of Letters Patent No. 118,823, dated September 12, 1871.

To all whom it may concern:

Be it known that I, HIRAM N. SMADE, of Manistee, in the county of Manistee and State of Michigan, have invented a new and useful Improvement in an Instrument for Extracting Packing from Stuffing-Boxes; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is an elevation of my device as when used as a worm or screw to engage with the packing. Fig. 2 is a similar view, showing the sleeve in section reversed, as is also the rod, which is ready for use as an ordinary packing-hook; and Fig. 3 is a perspective view of the instrument in the act of reversing.

Similar letters of reference indicate corresponding parts in the several figures.

This invention has for its object to provide a new and improved tool for extracting rubber, hemp, or other packing from stuffing-boxes; and it consists in a rod provided with a common packing-hook at one end and a worm or screw at the other, said rod sliding in a metallic sleeve, to which is pivoted a suitable handle, so that either end of the rod may be used, as circumstances may require.

In the drawing, A represents a metallic rod, provided at one end with a short hook, *a*, and at the other with a worm, or, preferably, a deep-threaded gimlet-pointed screw, *b*. B is a metallic sleeve, in which the rod slides freely when not secured or made stationary by a set-screw,

c, in the side of said sleeve, which is recessed at one end for the reception of the screw *b* and slotted at the other for the reception of the hook *a*, as shown. C is a handle, bent to the form shown, with its extremities sprung into sockets in the sides of the sleeve about the middle of its length, which extremities of the handle serve as trunnions for the sleeve to rotate upon.

When required to extract solidified rubber or other packing with which the hook will not engage, the instrument is arranged as shown in Fig. 1, when the rod can be screwed into said packing for removing it from the stuffing-box. For removing loose or fibrous packing the rod may be reversed, as shown in Fig. 2, and the ordinary hook be used for the purpose. In either position the rod is secured by the set-screw *c* passing through the side of the sleeve with its point bearing upon the rod.

The screw-end of the rod should be upset before cutting the screw thereon, in order to give the threads more depth than they would have otherwise, and consequently a firmer hold on the packing.

What I claim as my invention, and desire to secure by Letters Patent, is—

The construction and arrangement of the rod A provided with a hook, *a*, at one end and screw *b* at the other, sliding in the sleeve B provided with the set-screw *c*, and the handle C, substantially as described, for the purpose specified.

HIRAM N. SMADE.

Witnesses:

H. F. EBERTS,
MYRON H. CHURCH.