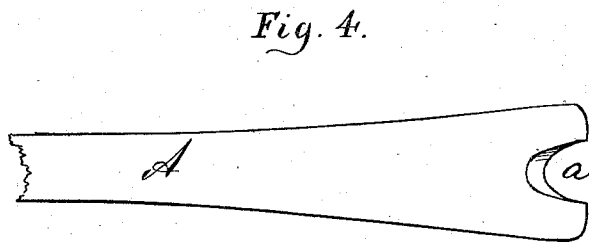
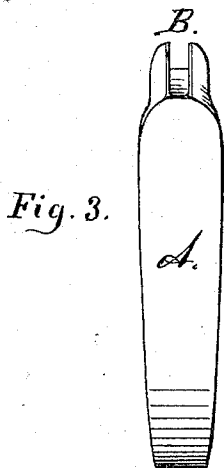
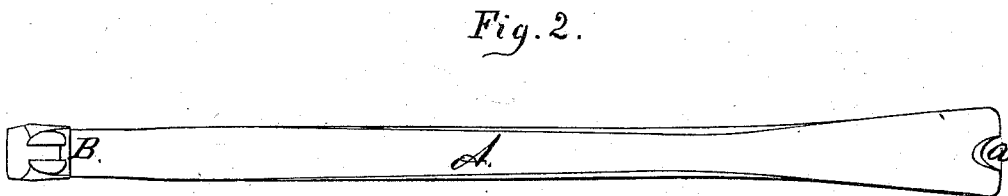
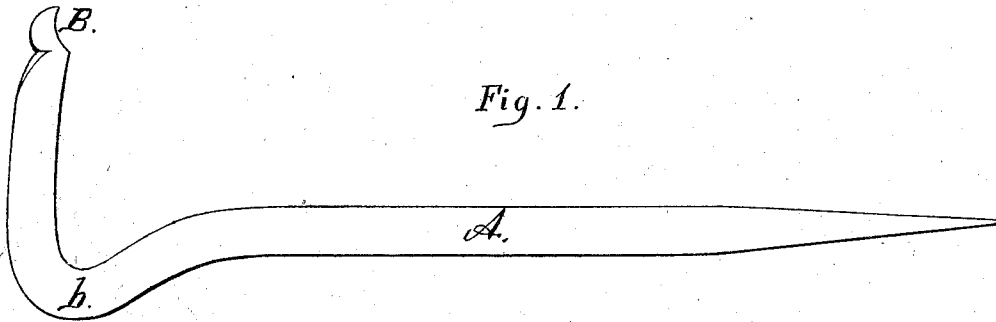


L. MILLS.
Box-Openers.

No. 138,177.

Patented April 22, 1873.



Witnesses:

A. T. Lacey
A. J. Sampson

Inventor:

Lucien Mills
By his Att'y G. B. Fowler

UNITED STATES PATENT OFFICE.

LUCIEN MILLS, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN BOX-OPENERS.

Specification forming part of Letters Patent No. **138,177**, dated April 22, 1873; application filed January 18, 1873.

To all whom it may concern:

Be it known that I, LUCIEN MILLS, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Box-Opener; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing which forms part of this specification.

Figure 1 is a side elevation. Fig. 2 is a plan view. Fig. 3 is an end view. Fig. 4 is a view showing the chisel end of the implement, made with a sharp curved notch in the center thereof.

Like letters in the different figures of the drawing indicate like parts.

This invention relates to a box-opener having its chisel end provided with a sharp curved notch in the center for cutting off iron hoops with which boxes are usually bound and prying off their lids or sides, and its opposite end made of an angular or foot-like shape with a curve or bend in the angle, and with claws for drawing nails, the object of the "curve or bend in the angle" being to present a good striking-point for the blow of a mallet, to force the claws under the head of the nail, and at the same time give greater leverage to the implement in drawing nails, the claws of the said implement differing from those of an ordinary hammer or clutch-bar in that they are so made that they can be readily driven in the wood under the head of the nail, the space between the said claws being made equal or straight to prevent the wood from wedging in or pulling up with the nail, as will be hereinafter more fully explained.

A is the implement, and *a* is the sharp curved notch in the chisel end thereof. B represents the claws on the opposite end, which latter are made of an angular or foot-like shape, with a curve or bend, *b*, in the angle, as will be best explained by reference to Fig. 1, so as to present a good striking-point for the blow of a hammer or mallet to force the claws into the wood under the head of the nail, and at the same time give greater leverage to the implement in drawing nails. The space between the claws is made equal or straight, leaving a square edge at the back therein, beveling downward or outwardly, see Figs. 2 and 3,) and so made with sharp

hooked points, (see Fig. 1,) their sides being rounded somewhat to a sharp edge, so that they can be easily driven into the wood under the head of the nail.

Thus, to draw the nail, it will be seen, by holding the implement to nearly a horizontal position and lengthwise with the grain of the wood and about one-eighth of an inch from the nail-head, so as to let the body of the nail into the space between the claws, a blow from the mallet will readily force the claws in the wood under the head, so that, with the leverage obtained by the curve or bend in the angle of the implement, the nail can be readily drawn out.

The object of the sharp curved notch in the chisel end of the implement is to cut off the iron hoops with which boxes are usually bound, which is readily accomplished by placing the notch over the edge of the hoop and giving the opposite end of the implement a blow or two with the mallet, which quickly severs it. The hoop is then pried up with the chisel end, the notch being made deep enough to straddle the nails, so as to pry up the latter with the hoop.

Ordinarily considerable difficulty is experienced in prying up or tearing off the hoop from the box, in consequence of the implement having an indirect bearing or purchase upon the nails fastening the hoop; but by providing the chisel end with a notch, as above explained, so as to straddle the nails, a direct bearing of the implement is obtained, and consequently the hoop is readily removed with the nails.

Having thus fully described my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

The box-opener consisting of implement A, having its chisel end provided with a sharp curved notch, *a*, in the center, and its opposite end made of an angular or foot-like shape, with a curve or bend, *b*, in the angle and with claws B, substantially in the manner and for the purposes as herein shown and set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of December, 1872.

LUCIEN MILLS.

Witnesses:

CHAS. G. ENDICOTT,
HENRY A. CRAWFORD.