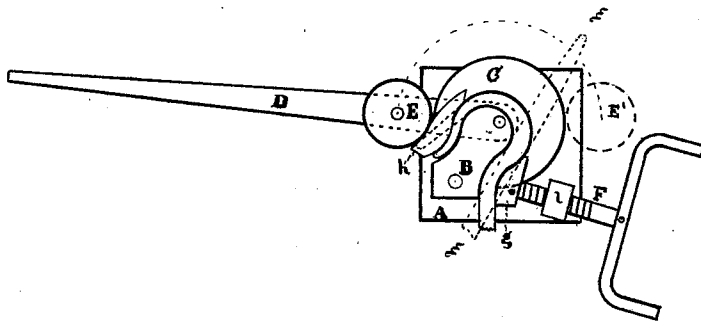


H. S. HASKINS & J. D. LANDRAM.
Device for Bending Hooks.

No. 220,074.

Patented Sept. 30, 1879.



Witnesses.

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UNITED STATES PATENT OFFICE.

HARRY S. HASKINS AND JOHN D. LANDRAM, OF PHILADELPHIA, PA.,
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IMPROVEMENT IN DEVICES FOR BENDING HOOKS.

Specification forming part of Letters Patent No. **220,074**, dated September 30, 1879; application filed July 2, 1879.

To all whom it may concern:

Be it known that we, HARRY S. HASKINS and JOHN D. LANDRAM, of Philadelphia, county of Philadelphia and State of Pennsylvania, have invented a new Device for Bending and Forming Hooks for Hoisting-Chains and other purposes; and do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which this device is shown in plan or top view.

A is a heavy cast bed-plate, suitably fixed to a bench or anvil-block. B is an inside former fixed at one end to the bed-plate A. C is a flange or disk placed between the former B and bed-plate A. D is an arm or lever pivoted to work between the flange C and bed-plate A. E is a roll journaled to the arm D, and standing above the flange C in a plane with former B. F is a screw having a thread through a lug or nut at *l*. *g* is a former-block attached by joint to the end of screw F. *h* is also a former-block for forming the point of the hook, as hereinafter described.

The object of this improvement is to facilitate the forming and bending of hooks used for various purposes, especially hoisting apparatus, that the hooks may not only be uniform, but also of such form that the point of suspension is directly in line with the straight part of the shank.

The manner of using this device is as follows: With the lever D carried back so that the bending-roll E is in the position indicated by the dotted circle at *E'*, and the back-setting screw F turned so as to bring the former-block *g* back to the lug *l*, the heated bar (which has been previously pointed) is placed in position on the flange or disk C, as indi-

cated by the dotted lines from *m* to *m*. Now, by bringing up the former-block *g* by means of screw F, the iron is bent into the first curve or concave of the fixed former B, and held as in a vise. Now, by means of the lever D the bending-roll E is brought around, as indicated by the dotted circle, to its position at *E*, and in doing this the heated bar is bent around the front or convex end of the fixed former B. This leaves the point end of the hook straight, as indicated by dotted lines shown through the former-block *h*. The roll E is carried back to allow the former-block *h* to be placed in its position between the said roll and the unbent portion of the hook; then, by bringing the roll E forward against the former-block *h*, it will force the iron into the curve or second concave part of the former B, and complete the bending of the hook.

For different sizes and forms of hooks it is only necessary to provide corresponding blocks and formers.

Having thus fully described our invention and its application, what we claim as new, and desire to secure by Letters Patent, is—

1. A hook bending or forming device having the movable former-blocks *h* and *g*, in combination with the fixed former-block B, lever D, and its roll E, substantially as described.

2. A hook bending and forming apparatus having the back-setting screw F, in combination with former-blocks *g* and *h*, fixed former B, and bending-roll E, the whole being arranged substantially as and for the purpose specified.

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Witnesses:

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