

J. W. LANDON.

SWAGES FOR SHARPENING FARM IMPLEMENTS.

No. 184,015.

Patented Nov. 7, 1876.

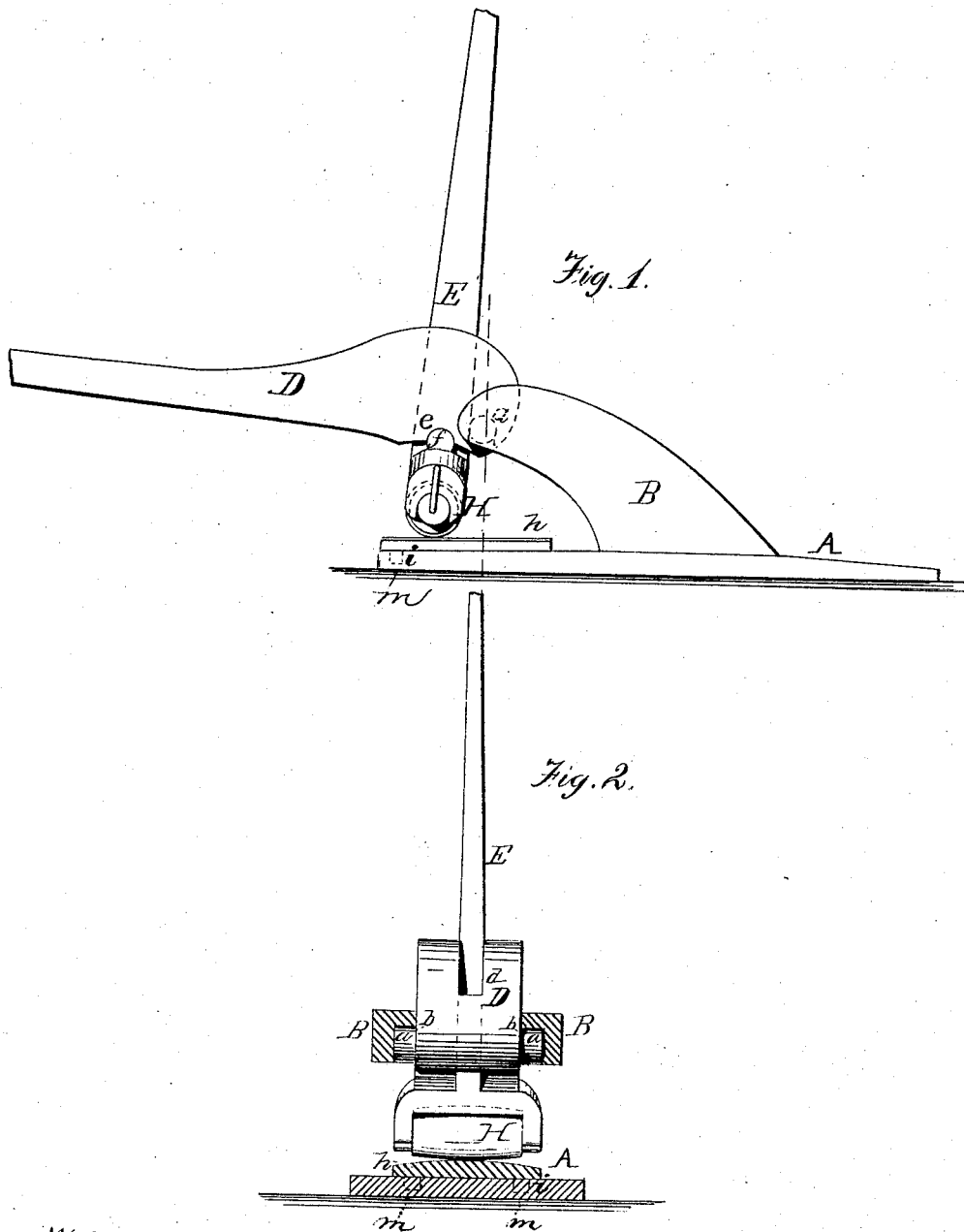


Fig. 1.

Fig. 2.

Witnesses;
Grenville Lewis
Chas. Gill

Inventor
James W. Landon
by his Atty.
Cox and Lee

UNITED STATES PATENT OFFICE.

JAMES W. LANDON, OF MOUND CITY, MISSOURI.

IMPROVEMENT IN SWAGES FOR SHARPENING FARM IMPLEMENTS.

Specification forming part of Letters Patent No. **184,015**, dated November 7, 1876; application filed August 23, 1876.

To all whom it may concern:

Be it known that I, JAMES W. LANDON, of Mound City, in the county of Holt and State of Missouri, have invented a new and useful Improvement in Plow-Sharpener, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improved plow-sharpener; and consists in the mechanism hereinafter specifically designated, its object being to provide an efficient device for sharpening plowshares, harrow-teeth, spades, and analogous implements, either in a cold or heated state, and with or without the beams, handles, or other attachments being removed.

Figure 1 is a side elevation of a device embodying the elements of the invention. Fig. 2 is a section through the line 1 2 of Fig. 1.

In the accompanying drawings, A represents a suitable stand or base, provided on its upper surface with the standards B, which are secured by any convenient means, their upper parts extending forward at an angle of about forty-five degrees, and being provided, near their ends, with suitable bearings to receive the ends *a* of the axles, secured upon the shank end of the lever D. This lever is preferably constructed as shown, its front end being of smaller dimensions than its rear portion, which is provided with the through-slot or elongated aperture *d*. The lower surface of the shank end of the lever D is furnished with the concave bearings *e*, to receive the axles *f*, which may be rigidly formed or constructed on or with the lever E. That portion of the lever E above the axles *f* extends upward through the slot *d* any distance desired by the operator, the lower end being of suitable configuration, and properly furnished with the roller H, which is journaled at each end, and has its superficies slightly curved or beveled off from its vertical center to its ends, so as to allow the edge of the plowshare or other implement to be sharpened by gradually forcing it under the roller, at the same time permitting it to receive a beveled edge. Upon the platform A, immediately beneath and slightly impinging the roller H, is placed the auxiliary platform or roller-block *h*, which may be of any suitable dimensions, and is provided with a convex upper surface, to co-operate with the roller H in giving a beveled edge to the article to be sharpened. The

lower front edge of the roller-block *h* is furnished with the studs *i*, which, when in proper position, are inserted into the pockets or receivers *m*, and serve to retain the block in its relation to the roller.

The several parts being in proper position, the edge of the plowshare, spade, or other implement, either in a cold or heated state, is inserted between the roller H and block *h*, and a weight applied to the outer end of the lever D. This causes the roller H to have an immense pressure upon the article beneath it. The upper end of the lever E is then grasped by the hand of the operator, and moved forward and backward, the roller, by this operation, receiving a corresponding movement, which causes the edge of the plowshare or other device to be rolled out or sharpened.

If desired, the end of the lever D may be constructed wide enough to allow the operator to stand upon it while working the lever E. This has been found a very convenient manner of operating the invention, as I have estimated that a man weighing one hundred and fifty (150) pounds, standing four feet from the fulcrum of the lever, would cause a pressure of fourteen thousand four hundred pounds to be exerted upon the roller H. Thus it is evident that a device working under this great lever-power will be enabled to roll out metal, as herein set forth, whether in a heated or chilled state.

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

1. The standards B, provided with the axle-bearings, in combination with the levers D and E, substantially as described.
2. In a plow-sharpener, the combination of the standards B, levers D and E, and auxiliary platform or block *h*, substantially as expressed.
3. The combination of the supporting-frame A B, levers D E, roller H, and anvil-block *h*, substantially as described.

In testimony that I claim the foregoing improvement in plow-sharpener, as above described, I have hereunto set my hand this 8th day of August, 1876.

JAMES W. LANDON.

Witnesses:

A. McLEOD,
J. D. CURTIS.