

H. H. Bigelow,

Tool for Keel Machines.

No. 113,008.

Patented Mar. 28, 1871.

Fig. 1

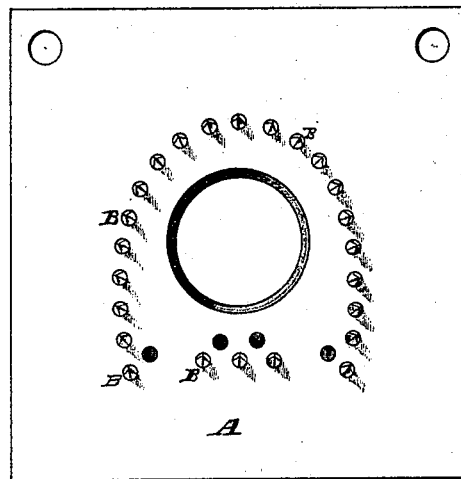
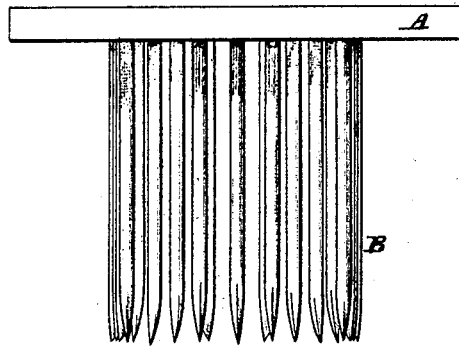


Fig. 2



Fig. 3

Witnesses

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HORACE H. BIGELOW, OF WORCESTER, MASSACHUSETTS.

Letters Patent No. 113,008, dated March 28, 1871.

IMPROVEMENT IN AWLS FOR HEEL-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

Know all men by these presents:

That I, HORACE H. BIGELOW, of the city and county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Awls for Heel-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing which forms a part of this specification; and in which—

Figure 1 represents a front view of my improved awls as set in their supporting-plate;

Figure 2 represents a bottom view of the same; and

Figure 3 represents, upon an enlarged scale, one of the awl-points.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it in detail.

The nature of my invention consists in the peculiar construction of the awl-points and the manner of combining them with their supporting-plate, as herein-after described.

In the drawing—

The parts marked A indicate the supporting-plate, in which the upper ends of the awls B are rigidly secured, and by means of which they are attached to the platen of the heel-machine.

The awls B are arranged in a semicircular row corresponding to the shape of the heel, and they are secured in the plate A by driving them down through openings in the plate from the upper side.

The openings are slightly countersunk around their upper ends, and the awls are headed so as to fit into the countersinking. The awls are thus prevented from being drawn out of the plate A by the action of the machine when withdrawing them from the heels. The heads of the awls rest against the platen of the machine when the plate A is in working position, and the awls are thereby prevented from being forced upward out of place.

The points of the awls B are of the peculiar form shown in fig. 3, being ground off considerably more at one side, *a*, than at the other, so that the point is inclined to one side.

The awls B are set into the plate A in such positions that their points incline outward from the center of the heel, excepting those at the front side, which are set so as to incline backward.

The result of this construction and arrangement is, that when the awls B are forced down into the heels, the pressure upon the long side *a* of the points causes the awls to spring outward, and thereby form the holes parallel with the inclined edges of the heel.

The awls at the front edge of the heel spring backward in a similar manner, so that when the nails are driven into the holes thus formed they will not be too near the surface of the leather at the front edge of the heel.

The positions of the awls in the plate A may be reversed, so that the inclination of their points will spring the awls inward instead of outward. This change may sometimes be desirable in case the heel should be pressed or formed with the bottom up, or in case the nails by which the heels are attached should be driven from the inside of the shoe or boot.

Having described my improved awls for heel-machines,

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

1. The combination of the peculiarly-constructed awls B, with their supporting-plate A, substantially as shown and described.

2. The peculiarly-constructed awl B, the point of which is made in form as fully shown in the drawing.

HORACE H. BIGELOW.

Witnesses:

THOS. H. DODGE,
A. E. PEIRCE.