

B. S. BISHOP

Machine for Curving Saws

No. 119,813.

Patented Oct. 10, 1871.

fig. 1

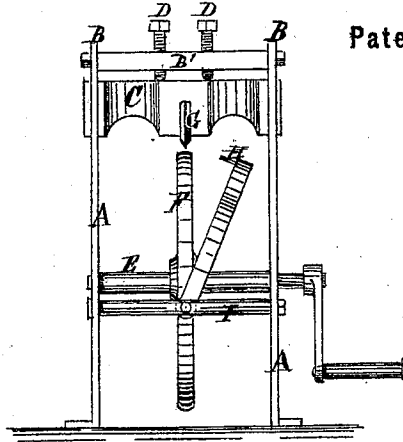


fig. 2

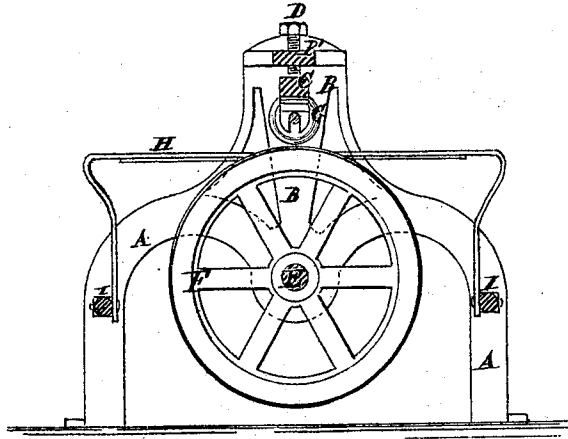
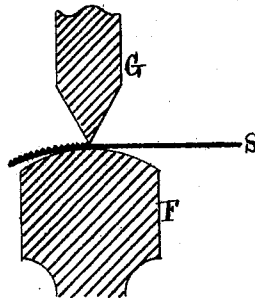


fig. 3



Witnesses:

Julius W. Leck
H. B. Rogers

Inventor:

B. S. Bishop
per attorney
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

BELA S. BISHOP, OF MENASHA, WISCONSIN.

IMPROVEMENT IN MACHINES FOR CURVING SAW-BLADES.

Specification forming part of Letters Patent No. 119,813, dated October 10, 1871.

To all whom it may concern:

Be it known that I, BELA S. BISHOP, of Menasha, in the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in Machines for Curving Saw-Blades; and I do hereby 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 end elevation, and Fig. 2 is a sectional side elevation of my machine. Fig. 3 is a cross-section of the wheel rims, showing the process of curving a saw-blade.

Like letters refer to like parts in each figure.

The nature of this invention relates to the construction of a machine by means of which saw-blades may be transversely curved; and it consists in the novel and peculiar arrangement in a suitable frame of a convexed rim-wheel and a peen-wheel journaled in a slide above it, so that in the combination of its principal operative parts, it is constructed and arranged as more fully hereinafter described.

In the drawing, A represents a metallic frame. B are standards, one at each side of the frame, connected at the top by a girt, B'. C is a cross-head, having a vertical movement in slots or guides in the standards B, and on which a downward pressure is exerted by the set-screws D, threaded in and through the girt. E is a shaft, transversely journaled in the lower part of the frame directly below the cross-heads, and is rotated by a crank or by power, if preferred. F is a wheel, having a heavy rim slightly convex on its periphery. G is a peen-wheel, journaled in the cross-head directly over the wheel F; the periphery of this wheel is sharp, as shown in Fig.

3, and it should be made of steel or case-hardened iron. H is a table, longitudinally arranged in the frame, passing along in a plane with the upper edge of the main wheel at one side thereof, while its legs or standards are pivoted at their lower end to transverse bars I at the ends of the main frame, on the vertical plane of the main wheel.

The operation of curving a saw is as follows: The cross-head is moved downward until the peen-wheel is a little less than the thickness of the saw-blade distant from the main wheel, when the saw-blade is placed on the table and its end pushed forward between the two wheels; if the main wheel be now rotated the saw will be drawn in between the two, and as it passes along on the table against a stationary guide thereon the peen-wheel cuts into it; and the repetition of this action, but on different lines, curves the saw, shown in Fig. 3, where S represents a saw-blade as though peened with a hammer, without being dished in all directions, only transversely to the length of the blade and direction of the cuts.

I do not wish to confine myself to the exact arrangement of the peen-wheel in the cross-head moving between the standards, as it may be otherwise arranged to produce the desired result.

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

The combination of the frame A, standards B, girt B', cross-head C, set-screw D, shaft E, wheel F, peen-wheel G, and table H, all constructed and arranged substantially as and for the purpose set forth.

BELA S. BISHOP.

Witnesses:

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