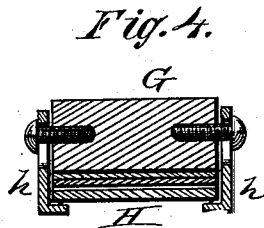
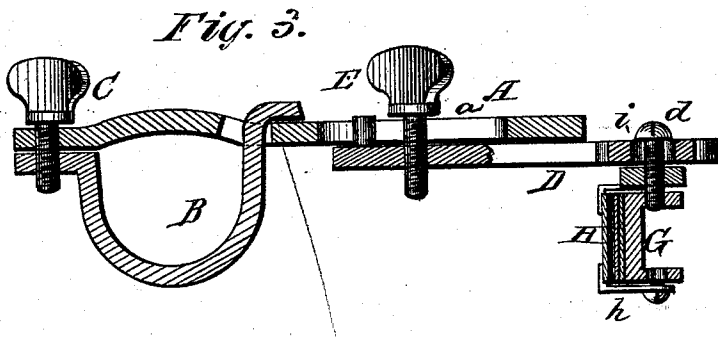
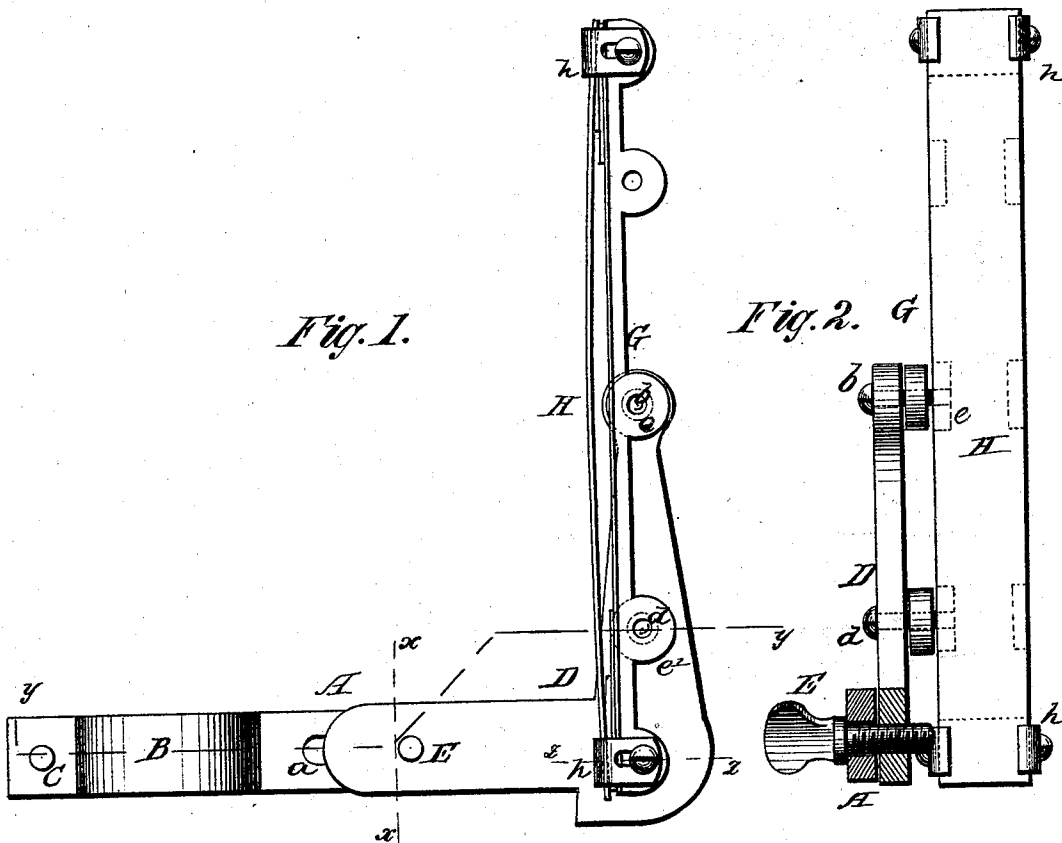


P. H. EDGE.
BAND-SAW.

Patented Jan. 11, 1876.

No. 172,003.



Guinnesses:
P. C. Dieterich
Am. Tupperman

Inventor:
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Per: C. H. Watson & Co Attorneys.

UNITED STATES PATENT OFFICE.

PHILIP H. EDGE, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF ONE-HALF
HIS RIGHT TO CHARLES V. YOUNG, OF SAME PLACE.

IMPROVEMENT IN BAND-SAWS.

Specification forming part of Letters Patent No. **172,003**, dated January 11, 1876; application filed
December 27, 1875.

To all whom it may concern:

Be it known that I, PHILIP H. EDGE, of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Band-Saws; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of an attachment for scroll-sawing machines, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a side elevation, and Fig. 2 is a front view; and Figs. 3 and 4 are sections on lines *x x y y*, Fig. 1.

A represents an arm, provided with a clip, B, with set-screws C at one end, for attachment to the band sawing-machine. The arm A is also formed with a longitudinal slot, *a*, through which is passed a set-screw, E, for fastening an L-shaped arm, D, thereto, said arm D being adjustable out and in on the bed-arm A. At the upper end of the arm D is pivoted a plate, G, by means of a screw, *b*, passing through the end of the arm and through an ear, *e*, on the back of the plate. The plate is adjusted at the proper angle and held in position by a screw, *d*, passing through a slot, *i*, in the arm D, and into another ear, *e'*, near the lower end of the plate. At each end of the plate G are clamps *h h*, for holding a glass plate, H, which forms a guard to prevent the band-saw from being pulled off from the pulleys.

The use of the band-saw for fine scroll-sawing has hitherto been attended with one marked disadvantage, namely, in "backing out" of an intricate cut, there being nothing to prevent the pulling of the saw toward the workman in this operation, which, unless done with great care, and a corresponding loss of time, not only endangers the twisting, and perhaps breaking of the saw, but also the spoiling of the work by chipping, &c. The practice has been with sawyers, when they

start to back out of a cut, to pick up a piece of waste wood and push it against the teeth of the saw, above the work, with one hand, while withdrawing the work with the other. This is more or less bother, and often does not accomplish the object, it being sometimes necessary to even stop the machine before the work can be disengaged.

This objection is entirely overcome by my invention, the glass strip or plate H being placed in front of the band-saw, and almost in contact with the teeth when ordinarily running. The invention is attached, preferably, to the depending arm carrying the back guide, the clamp being so adjustable as to adapt it to any band-saw machine.

The action is very simple. As soon as the operator attempts to back out of a cut, the teeth of the saw strike the glass, preventing any further forward movement, and the work can be withdrawn with ease.

The effect of the teeth upon the glass is not perceptible, nor are the teeth dulled in any degree by the glass; in fact, experience has proven that with this attachment the saws do not need resharpening as often as formerly, owing to the chisel-edge which is maintained upon the teeth by the occasional contact with the glass. This is an incidental, but by no means unimportant, item of the invention.

The glass strip H is slightly convex lengthwise toward the saw, to avoid any danger of the teeth catching on the upper or lower edges.

The guard H may, if desired, be made of other material, but I prefer to make it of glass.

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

As an attachment for band-saw scroll-machines, an adjustable front guide or stop, of glass or equivalent material, and set in an adjustable holder, for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

PHILIP H. EDGE.

Witnesses:

JAMES M. WILCOX,
ARTHUR J. HOLT.