F. H. Aiken,

Mitering Printers Rules.

No. 111,896. Patented Feb. 21, 1871.

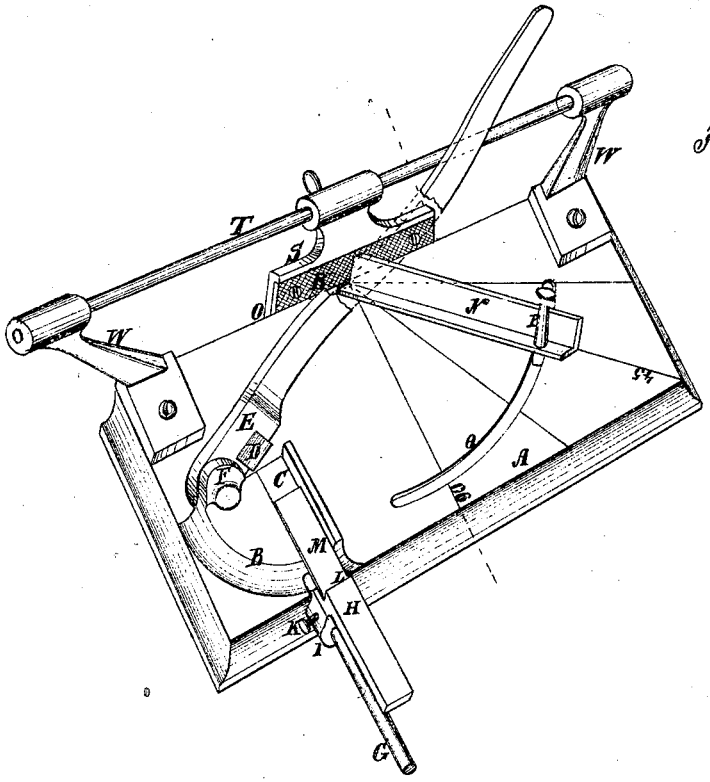

Fig. 1.

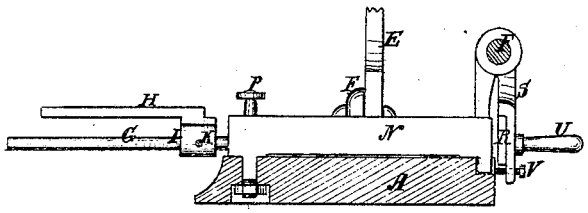

Fig. 2.

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UNITED STATES PATENT OFFICE.

FRANK H. AIKEN, OF FRANKLIN, NEW HAMPSHIRE.

IMPROVEMENT IN MACHINES FOR CUTTING AND MITERING PRINTERS' RULES.

Specification forming part of Letters Patent No. 111,896, *dated February* 21, 1871.

To all whom it may concern:

Be it known that I, FRANK H. AIKEN, of Franklin, in the county of Merrimack and State of New Hampshire, have invented a new and Improved Machine for Cutting and Mitering Printers' Rules; 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 make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to improvements in machines for cutting and mitering printers' rules; and it consists in an arrangement, in connection with a portable base, of certain devices hereinafter described and specified in the claim.

Figure 1 is a perspective view of my improved apparatus; and Fig. 2 is a transverse section on the line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is a platform, preferably rectangular in form, made of metal, and of any suitable size, on which, near one corner, is a raised bed, B, having a broad, shallow groove traversing its upper face, parallel with the end walls of block A, in the bottom of which is a fixed cutter, C, at the front of the inner end of which a shear-cutter, D, works, said cutter being mounted on the hand-lever E, which is pivoted to an ear, F, rising up from the bed.

G is a supporting-rod for a gage, H, for gaging the lengths of the plates to be cut. Said rod projects from the side of the bed in the vertical plane of the groove, holding the bed-cutter C at the end opposite the cutter, and the gage, having a lug, I, with a hole fitting the rod G, slides back and forth on it, and is held at any point by a thumb-screw, K.

The said gage has a notch at L, in which one end of the plate M to be cut rests; but it may be reversed on the rod H, and the other end presented toward the cutter when short pieces are to be cut.

This cutting-bed and the cutter are so arranged that the handle works over the bed in its longest way, and is, therefore, prevented from projecting away from it into or over space not occupied by it, which would be a less compact and convenient arrangement.

N is the holder for holding the rules to be mitered. It consists of a angle-bar of metal, and is pivoted at one end at the edge O of the bar, near the central point between the ends, and the other end has a clamping-screw, P, working in the curved undercut slot Q in the bed, for holding it at any angle to which it may be adjusted.

R is a mitering-tool, consisting of a file or other similar instrument, arranged on a holder, S, which is suspended from the guide-rail T, so as to be moved back and forth against the end of the rule when held in the holder N.

This tool-holder S has a handle, U, for working it, and one or more metallic screws, V, which bear against the edge of the bed, to regulate or guide the tool.

The guide-rail is mounted in supports W, projecting from the bed.

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

1. The tool-holder S, sliding on rod T, the cutter R, and set-screws V, combined with the bed A and adjustable holder N, substantially as specified.

2. A printers' rule-cutting and mitering apparatus, consisting of the cutters D C, the gage therefor, the adjustable holder, and reciprocating tool, and tool-holder, all arranged on one bed or platform, substantially in the manner specified.

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