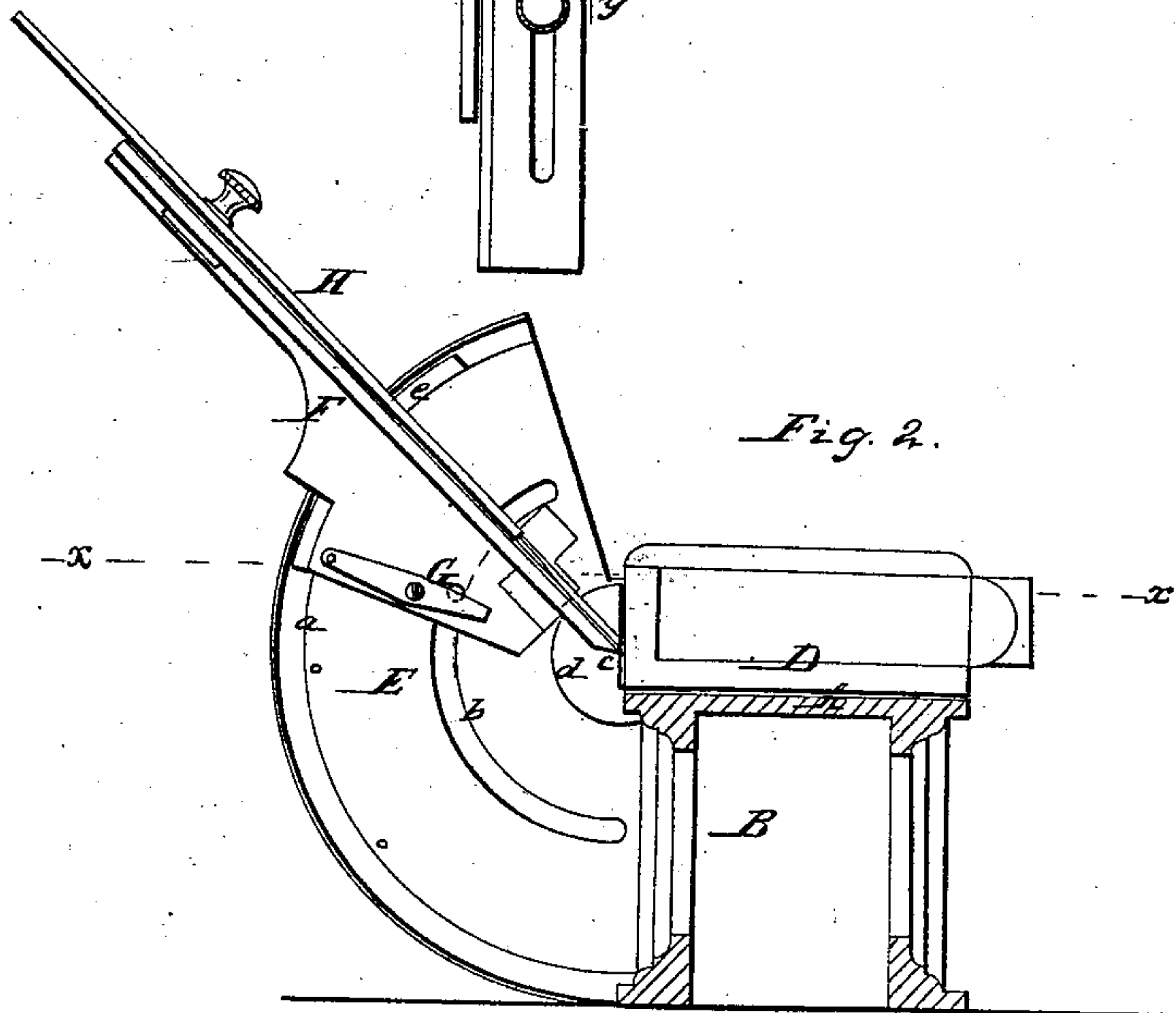
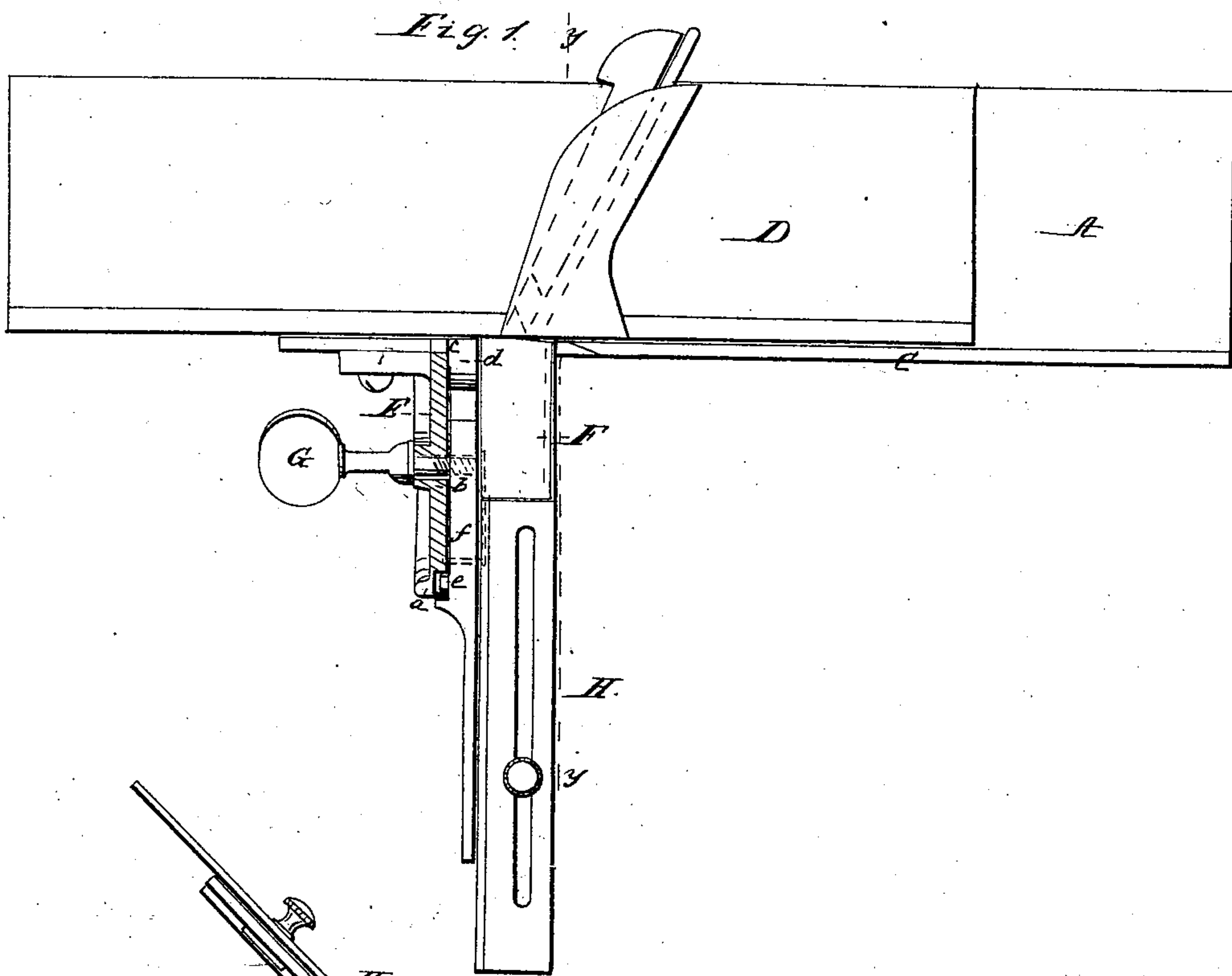


W. McDonald,
Mitering Printers' Rules,
N^o 13,197, Patented July 3, 1855.



UNITED STATES PATENT OFFICE.

WILLIAM McDONALD, OF NEW YORK, N. Y., ASSIGNOR TO R. HOE & CO.

MACHINE FOR MITERING PRINTERS' RULES.

Specification forming part of Letters Patent No. 13,197, dated July 3, 1855; Reissued March 17, 1868, No. 2,899.

To all whom it may concern:

Be it known that I, W. McDONALD, of the city, county, and State of New York, have invented a new and Improved Machine for
5 Beveling the Ends of Printers' Metallic Rules for Forming Miter-Joints; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed draw-
10 ings, making a part of this specification, in which—

Figure 1, is a plan or top view of my improvement, the sector guide plate being bisected horizontally as indicated by the line
15 (*x*) (*x*) Fig. 2. Fig. 2, is a transverse section of ditto (*y*) (*y*) Fig. 1 showing the plane of section.

Similar letters of reference indicate corresponding parts in the two figures.

20 The nature of my invention consists in attaching to an ordinary shooting or planing bed by a sector guide plate an adjustable bed arranged as will be presently shown and described so that said bed may be raised
25 and lowered to the required angle and cause the rule which rests on said adjustable bed to be properly presented to the plane iron so that the end of the rule may be cut or beveled as desired.

30 To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and the way it is used.

35 A, represents a horizontal cast iron plate, which is supported by suitable framing B. The plate and framing may be cast in one piece. The upper surface of the plate A, is planed or made smooth and one side is
40 provided with a vertical ledge or projection C.

D, represents a plane which may also be of cast iron. The face of the plane bearing against the inner surface of the ledge or projection C, and the body of the plane
45 resting upon the plate A.

E, represents a sector guide plate which is permanently attached to one side of the framing B. The guide plate is placed in a vertical position and projects at right angles from the framing B. In one side of
50 the sector plate near its edge there is cut a recess or groove (*a*) concentric with the circular edge of the plate, and a curved slot (*b*) is cut through the plate concentric with
55 the recess or groove (*a*) and about midway

between the curved or circular edge of the sector plate and the center (*c*) of a circle of which the sector plate forms a part. At this center (*c*) there is attached to the sector plate a semicircular plate or hub (*d*). 60

F, represents a bed plate which is formed of a metal strip having a curved projection (*e*) attached to one of its sides which projection fits in the recess or groove (*a*) in the sector plate E. 65

G, see Fig. 1, is a set screw which passes through the curved slot (*b*) and into the side of the plate E.

The inner side or edge of the plate E, has a ledge or projection (*f*) upon it, and the lower or inner end of this ledge or projection bears against the periphery of the hub or semicircular plate (*d*). The other portion of the lower or inner end of the bed F, extends as far as the upper edge of the ledge or projection C, on the plate A, the ledge C, being cut away or removed underneath the edge of the bed F. On the upper surface of the bed F, there is an adjustable gage H. 70 75 80

By operating the set screw G, the bed F, may be raised or lowered, and secured at the desired point, the inner or lower edge of the bed F, being at all times at the same point on a line with the upper part of the ledge or projection C. The rule shown in red is placed upon the bed F, the back edge of the rule bearing against the ledge (*f*) and the end of the rule to be beveled bearing against the face of the plane D. By
90 shoving the plane D, back and forth the end of the rule will be beveled or cut at an angle corresponding to the angle of inclination of the bed F. And the end of the rule may be beveled in either direction by inclining the bed above or below the horizontal line with the plate A, as occasion requires. If the rule could be turned on the bed F, the lowering of the bed F, below the plate A, would not be required, but this
95 cannot be done as the face of the rule would be injured in consequence of bearing against the ledge (*f*). 100

The object of beveling the ends of the rules is to form miter joints in locking the rules together in rectangular form for borders inclosing the type, many of the rules are ornamental and are used for business cards and other purposes.

I do not claim the plate A, and plane D, 110

for they are well known and in general use, but

What I do claim as new and desire to secure by Letters Patent is—

5 Attaching to the bed A, and framing B, a sector guide plate E, to which plate E, the bed F, is secured by a set screw G, the bed F, having a curved projection (e) attached to it which projection works in a

recess or groove (a) in the plate E, by which 10 the bed F, may be adjusted at the desired angle with the plate A, and the ends of the rules beveled or cut as herein shown and for the purpose set forth.

W. McDONALD.

Witnesses:

JAS. GEO. MASON,

J. W. COOMBS.

[FIRST PRINTED 1912.]