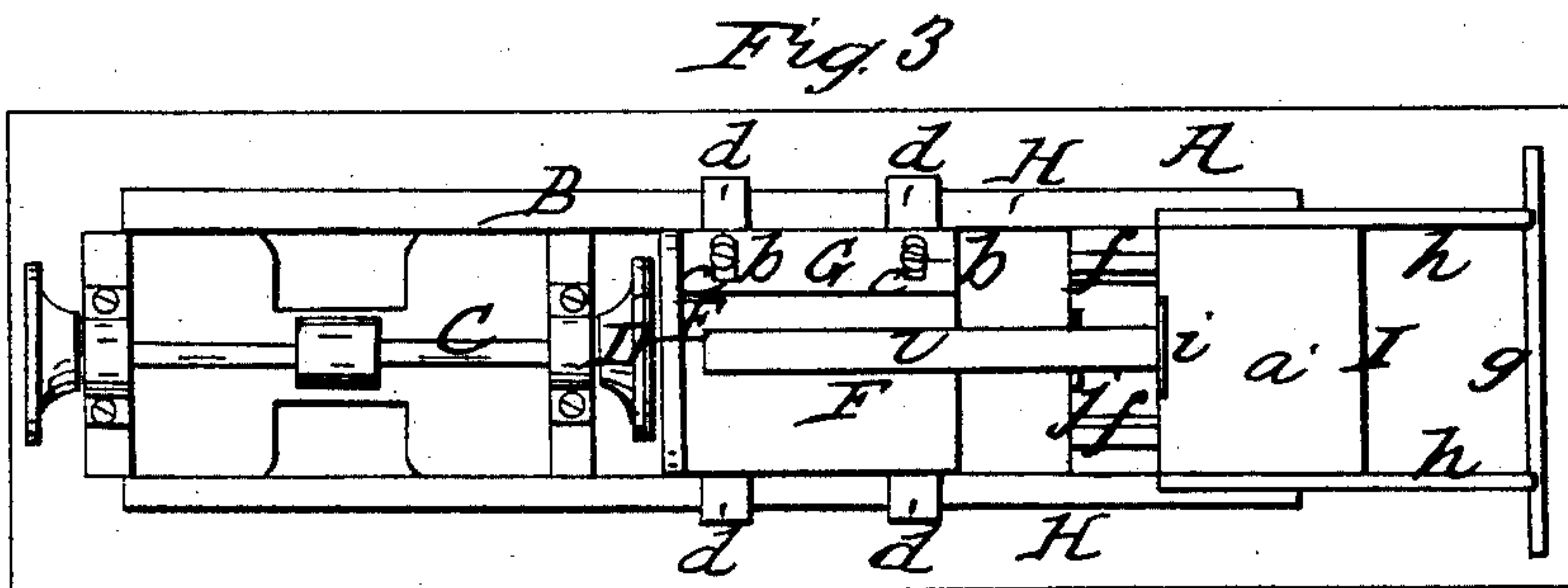
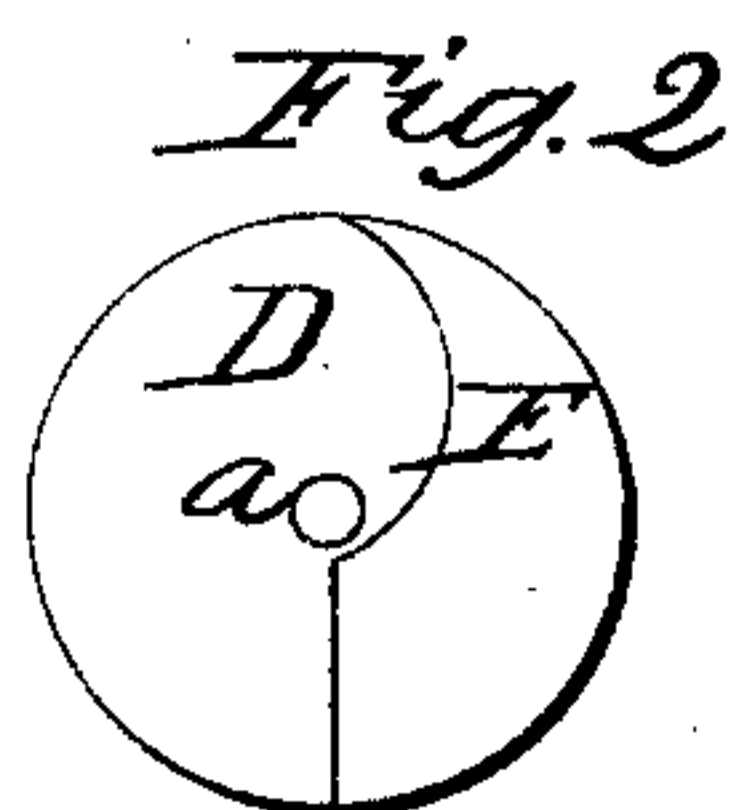
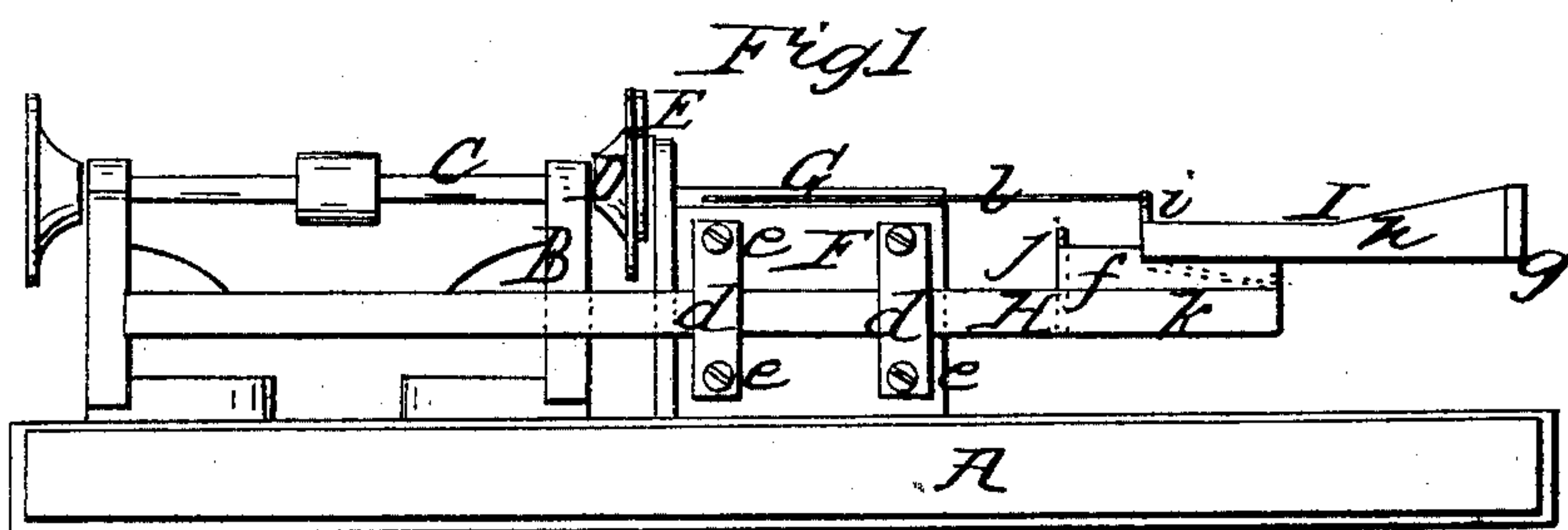


E. W. Roff,
Making Blind Slats.
Nº 11,907. Patented Nov. 7, 1854.



UNITED STATES PATENT OFFICE.

ERASTUS W. ROFF, OF NEWARK, NEW JERSEY.

MACHINE FOR CUTTING TENONS ON BLIND-SLATS.

Specification of Letters Patent No. 11,907, dated November 7, 1854.

To all whom it may concern:

Be it known that I, ERASTUS W. ROFF, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Machines for Cutting Tenons on Blind-Slats; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side elevation of my improved machine. Fig. 2, is a face view of the disk with cutter attached. Fig. 3, is a plan or top view of my improved machine.

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

The nature of my invention consists in the employment or use of a gage applied to the machine, as will be presently shown, for the purpose of causing the tenons on the slats to be cut the desired length, and all equal to each other.

To enable others skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, represents the base or bed of the machine, on which a stationary head B, is secured, said head B, having a mandrel, C, at its upper part. On the inner end of the mandrel there is a circular disk, D, having attached to its face a cutter, E, the cutting edge of which is of concave form as shown clearly, in Fig. 2. At the center of the disk D, there is an aperture (a) into which the tenon of the slat passes as it is cut by the cutter E.

Directly in front of the disk D, and secured to the bed or base A, there is a block, F, the upper surface of which is on a level with the aperture, a, in the disk D. On the upper surface of the block F, at one side, there is a guide strip, G, secured to the block by screws, b, which pass through oblong slots (c) in the guide strip.

H, is a frame which works through cleats (d) attached to the sides of the block F, by screws, e. On the outer end of this frame, H, there are secured two ways (f) (f) on which a gage I works, said gage being formed of a small platform or board (a') fitted on the ways (f) (f) and hav-

ing a bar or rail (g) at its outer end, the bar or rail being secured to the platform or board by side bars (h) (h) as clearly shown in Fig. 2. On the inner end of the platform or board (a') there is a projection (i) formed of metal or other material, said projection extending upward a suitable distance above the surface of the platform or board (a'). On the inner edge of the bed on which the ways (f) (f) are secured, there is a stop (j) which projects upward beyond the level of the gage I, and therefore prevents it from passing beyond it or near the block F. To the under side of the gage I, and at its inner end there is attached a spring, k, the opposite end of which is secured to the outer end of the frame H,—see dotted lines Fig. 1. The blind slats represented by, l, are previously sawed the required length, and breadth, and are placed upon the block, F, one end of the slat (l) being against the projection (i), and one side against the guide strip G. The gage (I) is then pressed inward toward the disk D, till the projection (i) strikes the stop (j) and the blind slat (l) is forced into the aperture (a) the required distance, and the tenon cut thereon of the desired length. When the gage is relieved of the pressure by which it was forced toward the disk and center, it is thrown back to its original position by the spring k. The tenons are all cut of an equal length, as the gage can only be pressed or moved toward the disk D, a certain distance. In order to vary the length of the tenons, the frame H may be moved further out or in by relaxing the cleats (d), and thus increase or diminish the distance of the guide from the disk.

I do not claim the disk D, with its cutter E attached, for that device has been previously used; but

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

The employment or use of the gage, I, applied to an adjustable frame H, and arranged in the manner and for the purpose, as set forth.

E. W. ROFF.

Witnesses:

S. H. WALES,

J. W. HAMILTON.