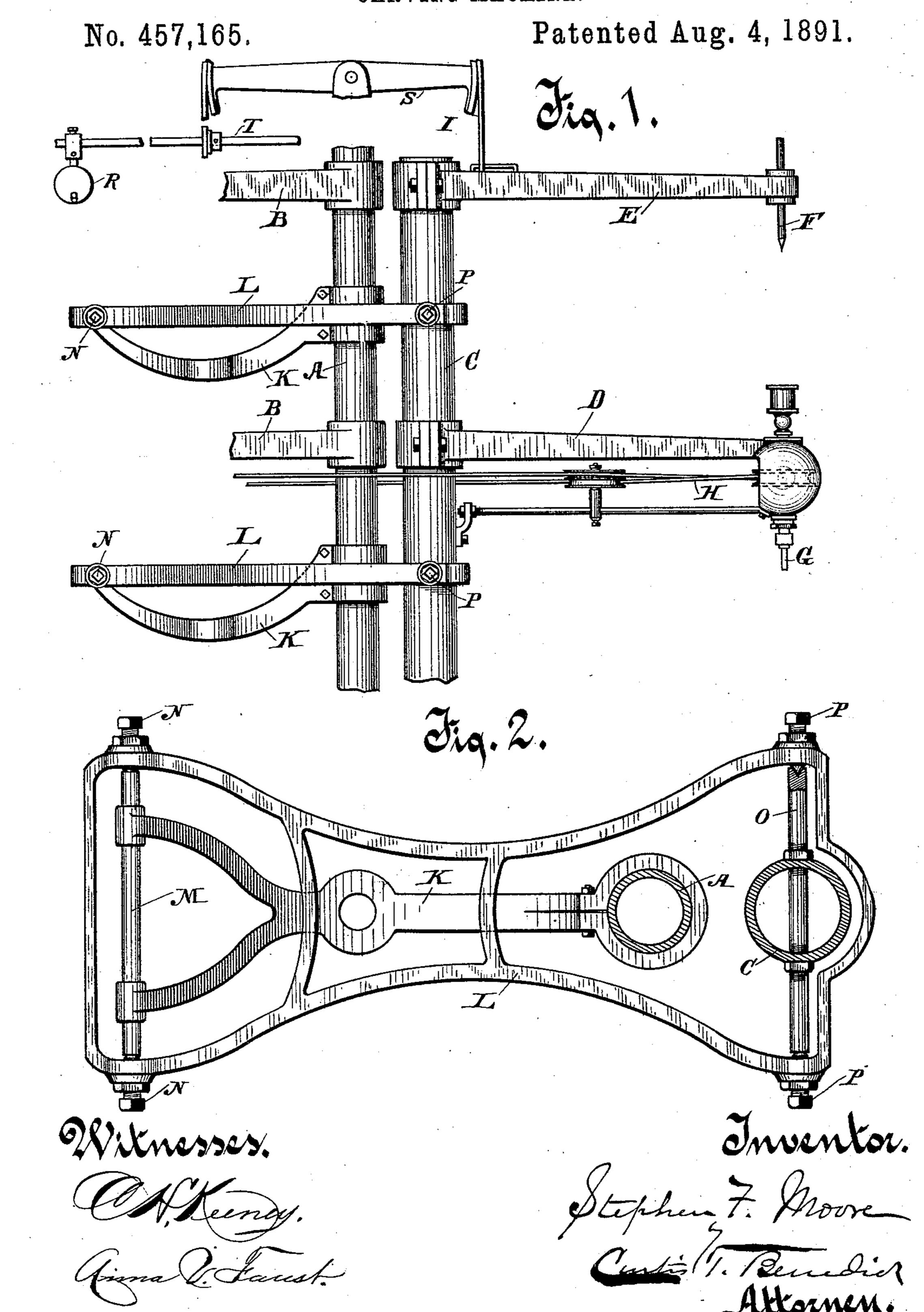
S. F. MOORE. CARVING MACHINE.



UNITED STATES PATENT OFFICE.

STEPHEN F. MOORE, OF MILWAUKEE, WISCONSIN.

CARVING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 457,165, dated August 4, 1891.

Application filed February 13, 1891. Serial No. 381,363. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN F. MOORE, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and 5 useful Improvement in Carving-Machines, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention relates to improvements in to that class of carving-machines in which a rotating cutting-tool controlled by a guidingtool fixed in a concurrently-moving part of the frame is used to accomplish the desired work, and is an improvement on the machine 15 for which Letters Patent No. 452,144 were issued to me on May 12, 1891, to which reference is made for more full information of the general construction of the machine.

In the drawings, Figure 1 is a fragment in 20 elevation of a carving-machine in which my improved devices are embodied. Fig. 2 is a top plan view of the improved device, a part being broken away to show interior construc-

tion. The vertical standard A is fixed and supported in horizontally-swinging arms B. The post C carries fixed thereon one or more toolcarrying arms D and the guide-carrying arm E. The guide F is supported in the arm E 30 above the rotating cutting-tool G, carried on the arm D, which cutting tool is rotated by a belt H, running on a pulley on the shank of the tool and on a power-supplying pulley. The post C and the thereon-carried arms E 35 and D are supported by a counterpoise R, connected mechanically to the arm E through cord I, lever S, and lever T, connected to lever S and carrying the counterpoise. Any similar or equivalent means of balancing the 40 post C and arms thereon may be used. The post C is required to have a limited amount of vertical movement, and is connected with the standard A, so as to have a horizontal swinging motion therewith; and the object of 45 my invention is to provide proper devices for connecting the post C with the standard A, so as to secure the horizontal swinging mo-

tion therewith and permit a limited amount of substantially vertical and entirely parallel 50 motion relative thereto. Bracket-arms K are fixed on the standard A and project rearwardly therefrom. Oscillating arms L are pivoted at their rear ends to the arms K by I

and through pivot-pins M, fixed in the arms K, having pivot-bearings on the bolts N, turn- 55 ing through the arms L. At their front ends the arms L are pivoted to the post C by and through the pins O, fixed in the post C, which pins have pivot-bearings on the bolts P, turning through the arms L. By this construct 60 tion the post C is held to horizontal movement with the standard A and has a limited vertical movement through the oscillating arms L.

What I claim as new, and desire to secure 65 by Letters Patent, is—

1. In a carving-machine, the combination, with a vertical horizontally-swinging standard, of a vertical tool and guide-carrying post in front of the standard, and devices for con- 70 necting the post to the standard, so as to hold it to horizontal movement therewith and to permit a substantially vertical movement parallel therewith, which devices consist of rearwardly-extending arms fixed to the stand-75 ard, and oscillating arms pivoted to the rearwardly-extending arms at a distance in the rear of the standard and pivoted to the post in front of the standard, substantially as described.

2. In a carving-machine, the combination, with a horizontally-swinging vertical standard A and thereto - affixed rearwardly - projecting brackets K, of a post C, counterpoised in front of the standard A, oscillating arms 85 L, pivoted at their rear ends to the brackets K, so as to have vertical movement only relative thereto and pivoted at their front ends to the post C, so as to permit vertical oscillation only thereon, substantially as described. 90

3. In a carving-machine, the combination, with a horizontally-swinging vertical standard and thereto-affixed rearwardly-projecting bracket-arms, of a tool-carrying post located and movable vertically in front of the 95 standard, oscillating arms L, and pivot-pins M and O, by which the arms L are pivoted, respectively, at their rear ends to the bracketarms and at their front ends to the verticallymovable post, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

STEPHEN F. MOORE.

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Witnesses: C. T. BENEDICT, ANNA V. FAUST.