A. Rennie,

Gage Lathe,

Patented July 20,1858.

Nº20,956.

Fig.1.

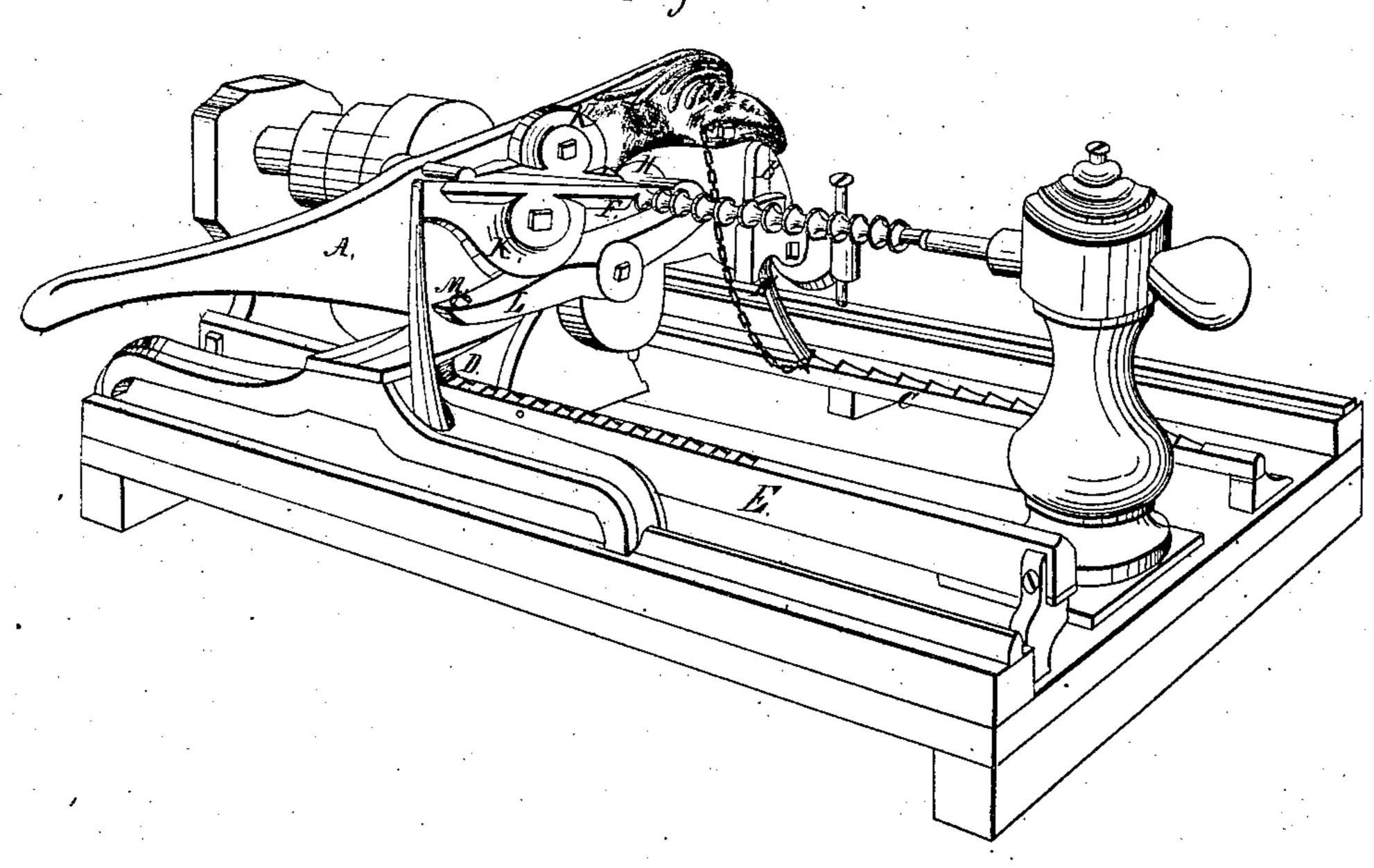
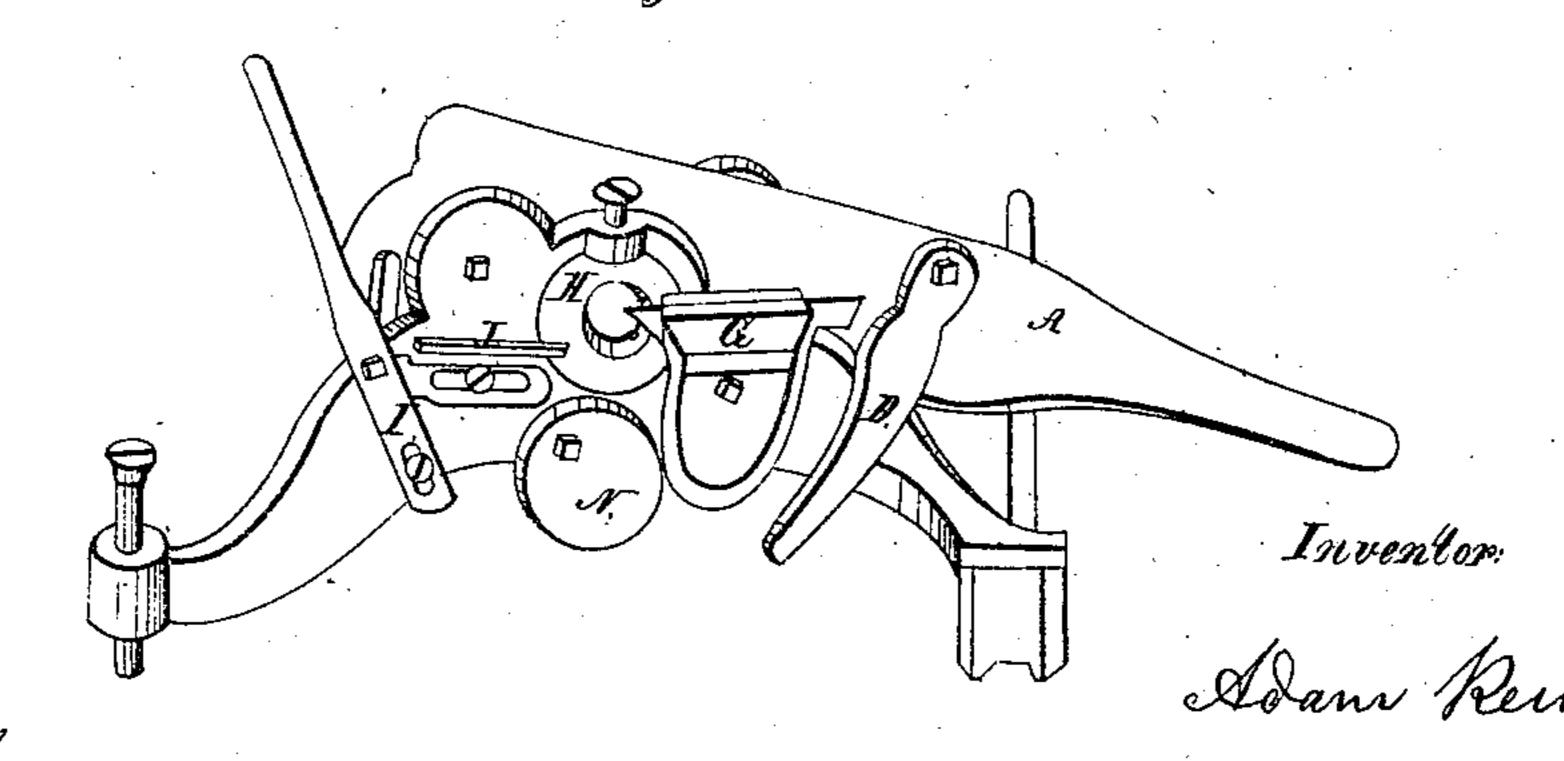


Fig. 2



Mitnesses: Min I. Remnie E. L. French

## UNITED STATES PATENT OFFICE.

A. RENNIE, OF BINGHAMTON, NEW YORK.

## METHOD OF FEEDING THE TOOL-CARRIAGE IN TURNING-LATHES.

Specification of Letters Patent No. 20,956, dated July 20, 1858.

To all whom it may concern:

Be it known that I, ADAM RENNIE, of the village of Binghamton, in the county of Broome and State of New York, have in-5 vented a new and useful Improvement on a Machine for the Purpose of Turning Mold Work and other Ornamental Turning; and I do hereby declare that the following is a full, clear, and exact description of the con-10 struction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view and Fig. 2

15 is an end view.

The rest which carries the tools or cutters &c. moves lengthwise, on ways in the usual manner.

(A) is the operating lever, by which the 20 work is done, simply by raising and lowering, and by which movement the rest is carried forward by operating on the jointed arm or propeller (B) which works in the rack (C). The arm (D) attached to the 25 lever (A) meshes into the rack (E) and holds the rest in its proper place, till the tool or cutter (F) has done its work. The lever (A) is again raised and lowered in succession till the work is completed. The 30 lever (A) is then raised upright for the purpose of drawing the rest back to the place of beginning.

The chain attached to the arm (B) and lever (A) is for the purpose of holding up 35 the arm (B) till it passes over the rack (C) in drawing the rest back and to be out of the way when putting in the next piece

to be turned.

The tool (G) is the roughing tool, that prepares the piece to pass through the man- 40

drel (H) in the usual way.

(I) is a lever to which is attached a tool (J) for the purpose of cutting tenons on the piece when turned. (K) is an adjustable tool holder attached to the lever (A) 45 and secured by set screws. (L) is an adjustable back rest for the purpose of keeping the piece from jarring while turning and is operated upon by the screw (M) in the lever (A). The tool (G) is fixed in an ad- 50 justable tool holder and set by an adjustable eccentric (N).

The mandrel (H) is one of a series of different sizes and can be changed for different sizes of work. The tool in the holder (K) 55 may be of different formations according to the pattern you wish to turn. This machine can be easily attached to any common lathe

for turning wood.

In the foregoing specification I claim— 60 The combination of the lever (A) with the arms D and the jointed propeller (B B) with the racks (E) and (C) respectively; for the purpose of feeding the tool carrier as described; and I claim the back rest (L) 65 for the purpose described.

In witness whereof I have hereunto subscribed my name this 27th day of January eighteen hundred and fifty eight (1858).

ADAM RENNIE.

Witnesses:

W. I. RENNIE, E. S. French.