

D. B. Bartholomew,
Scroll Sawing Machine.

№ 30,864.

Patented Dec. 11, 1860.

Fig 1.

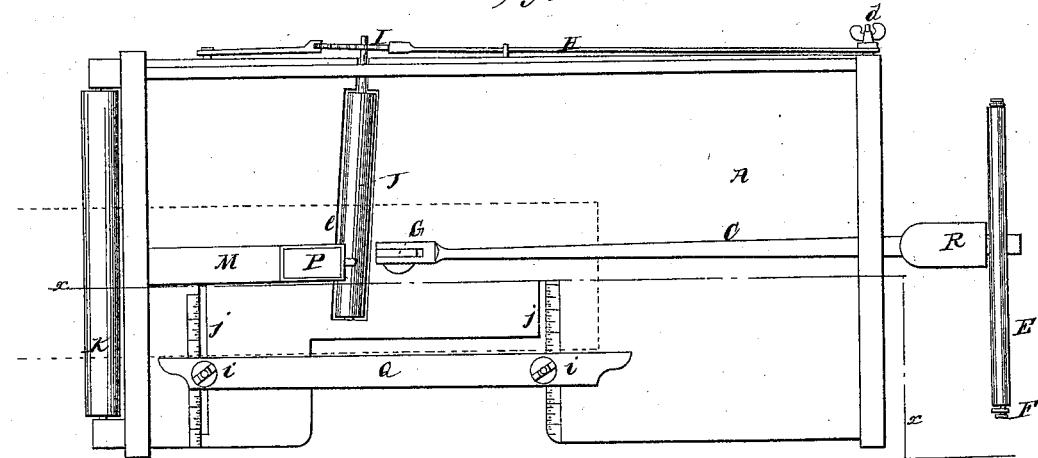


Fig 2.

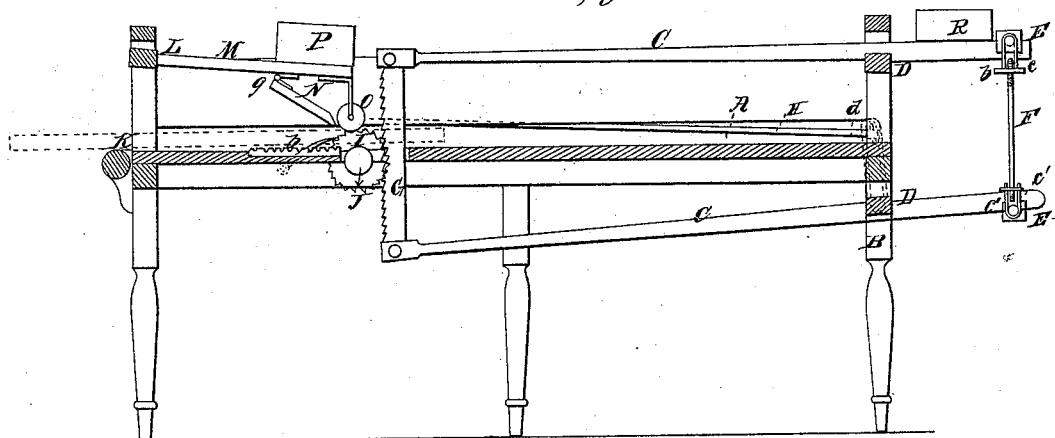
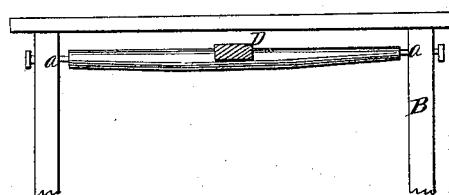


Fig 3.



Witnesses.

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D. B. BARTHOLOMEW, OF LANCASTER, PENNSYLVANIA.

ARRANGEMENT OF DEVICES IN SAWING-MACHINES.

Specification of Letters Patent No. 30,864, dated December 11, 1860.

To all whom it may concern:

Be it known that I, D. B. BARTHOLOMEW, of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented 5 a new and Improved Sawing-Machine; 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 10 which—

Figure 1 is a plan or top view of my invention. Fig. 2 a side sectional view of the same taken in the line α , α , Fig. 1. Fig. 3 a detached view of one of the rock shafts 15 pertaining to the same.

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

The object of this invention is to obtain a simple and portable sawing machine which 20 may be operated with but a moderate expenditure of power and manipulated with the greatest facility.

To enable those skilled in the art to fully understand and construct my invention I 25 will proceed to describe it.

A, represents a platform which is supported at a suitable height by a proper framing B, and C, C, are two levers which are attached to rock shafts D, D, at one end 30 of the framing B. The shafts D, D, are placed one over the other in the same plane and work between center points a , those of one shaft D, being shown clearly in Fig. 3.

The outer end of each lever C, has a cross 35 bar E, attached to it at right angles, and said bars E, at one or both ends are connected by an extension rod F, which may be simply a screw rod having one end connected to a loop b, on one bar by a head c, and the opposite end provided with a screw 40 c', which fits into the plate of a similar loop c'', on the other bar, as shown in Fig. 2.

To the inner ends of the levers C, C, a saw G, is attached. This saw may be of the 45 ordinary reciprocating kind and it is strained by adjusting the extension rod F, which connects the bars E, E, at the outer ends of the levers C, C. The saw G, works through a slot in the platform A.

To one end of the lower rock shaft D, there is attached an arm d, and to this arm there is secured a rod H, the inner end of 50 which terminates in a pawl which engages with a ratchet I, see Figs. 1 and 2. The ratchet I, is placed on one end of the axis 55 of a corrugated or fluted roller J, which has

an oblique position relatively with the platform A, and it projects through a slot e, in the platform so that its upper edge will be slightly above the surface of the platform, as shown clearly in Fig. 2.

To the end of the platform A, opposite to that where the rock shafts D, are attached there is placed a roller K, and in the framing B, directly above the roller K, there is 60 secured a shaft L, the ends of which work between centers. To the shaft L, there is attached at right angles a bar M, and to the under side of this bar there is secured by a hinge g, a support N, as shown clearly in 65 Fig. 2. To the end of bar M, there is attached a roller O, and on the bar directly over the roller there is secured a weight P.

On the platform A, directly underneath the bar M, there is secured a rack h. The 75 roller O, and saw G, are in line with each other. Q, is a gage secured to the platform A, by screw bolts i, i, which pass through slots j, j, in the platform as shown in Fig. 1.

The upper lever C, has a weight R, attached 80 for the purpose of balancing the levers.

The operation is as follows: The levers C, C, are operated or vibrated by any convenient power and a reciprocating motion 85 is thereby given the saw G. The stuff to be sawed, shown in red outline, is placed on the platform A, and against the gage Q, which is adjusted according to the width the stuff is to be sawed. The roller O, is placed, on 90 the stuff, the weight P, serving to keep the stuff in proper position on the platform. Each time the saw G, ascends, the pawl H, is actuated by the arm d, and the roller J, turned so as to feed the stuff to the saw. 95 The oblique position of the roller J, has a tendency to keep the stuff in contact with the gage Q, and prevent the casual displacement of the stuff as it is fed to the saw; and when the end of the stuff leaves the 100 roller O, the support N, drops and catches into the rack h and sustains the roller O, preventing the latter forcing the stuff against the saw. This is an important feature of the invention.

The center points a , between which the rock shafts D, D, are secured are formed on screw rods and admit of a lateral adjustment of the levers C, C, and saw G, the shafts D, being made somewhat shorter than 110 the width of the space between the uprights of the framing through which the center

points *a*, pass. The cross bars *E*, are also made longer than the frame is wide in order that the straining rod or rods *F*, may not be in the way of the stuff as the latter passes 5 over the platform *A*. This is very convenient as it admits of stuff of any length being sawed in the machine.

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

The arrangement of the hinged support and rack *h* with the pressure roller *O* and adjustable bar *M* in the manner herein shown and described, so that when the roller 15 passes the end of the stuff the support *N*

will take to the rack *h* and prevent the roller from pushing the stuff against the saw all as set forth.

I do not claim broadly the invention of obliquely placed feeding rollers; but

I do claim—

The arrangement as herein shown and described of the obliquely placed feeding roller *J* and adjustable gage *Q*, with the platform *A* saw *G*, levers *C*, *C* shafts *D*, *D* rod *F* and roller *O*, all as herein shown and described.

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Witnesses:

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