(No Model.)

B. G. LUTHER.

SWING SAWING MACHINE.

No. 589,004. Patented Aug. 31, 1897.

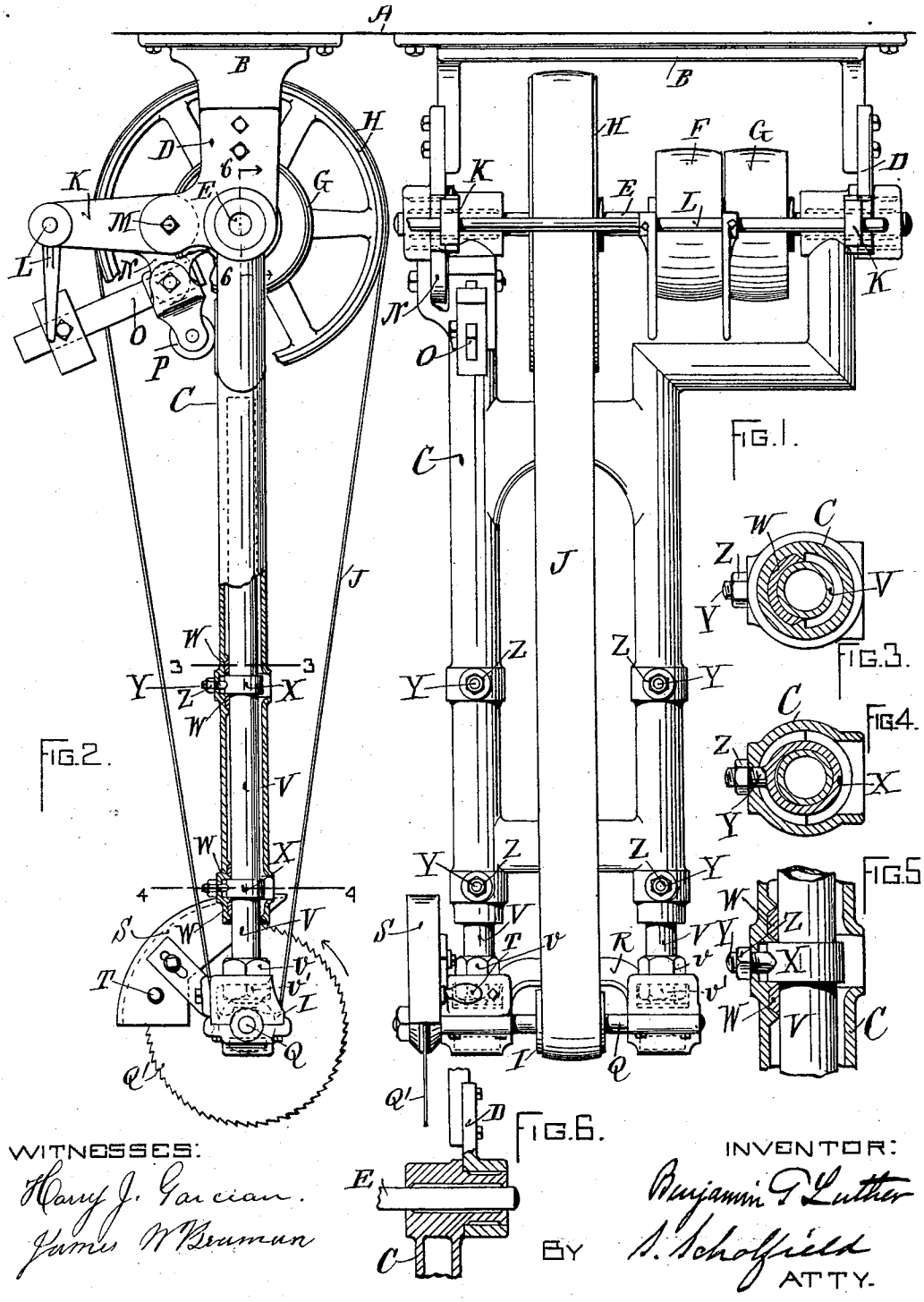


FIG. 1.

FIG. 3.

FIG. 4.

FIG. 5.

FIG. 6.

WITNESSES:

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SWING SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 589,004, dated August 31, 1897.

Application filed September 19, 1896. Serial No. 606,444. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN G. LUTHER, a citizen of the United States, residing at Worcester, in the State of Massachusetts, have invented a new and useful Improvement in Swing Sawing-Machines, of which the following is a specification.

In swing sawing-machines as heretofore constructed the swinging frame has not been made readily adjustable to the height of the ceiling in different rooms, but has been made suitable for rooms in which the ceiling was of minimum height, and a blocking employed for the attachment of the machine to the ceiling in rooms of greater height; and it is the object or my invention to provide a machine which will answer all requirements without the necessity of providing a blocking; and my invention consists in the improved construction and arrangement of parts, as hereinafter fully set forth.

In the accompanying drawings, Figure 1 represents a front elevation of the machine. Fig. 2 represents a side elevation of the same with a portion broken away to show the means for clamping the saw-arbor frame in its set position. Fig. 3 represents an enlarged transverse section taken in the line 3 3 of Fig. 2. Fig. 4 represents an enlarged transverse section taken in the line 4 4 of Fig. 2. Fig. 5 represents an enlarged detail section showing the Babbitt-metal bearing-seats and the clamping-ring. Fig. 6 represents a detail section taken in the line 6 6 of Fig. 2.

In the drawings, A represents the ceiling to which the machine is to be attached; B, the attaching-base to which the hollow swinging frame C is pivoted by means of the brackets D D, the said frame being journaled in the brackets D, as shown in the detail section, Fig. 6. Upon the shaft E, journaled in the frame C, are placed the fast and loose pulleys F and G and the pulley H, which latter serves to drive the pulley I upon the saw-arbor Q by means of the belt J, and to the inner side of the brackets D D are attached the radially-adjustable brackets K K for holding the sliding belt-shipper L, the said brackets K being each secured to its bracket D by means of a single bolt M. To the ear N at the lower portion of one of the brackets D is pivoted the weighted bell-crank lever O, carrying the antifriction-roller P, which bears against the forward side of the frame C, the operation of the said lever being to automatically carry the frame C back to its rearward position. The saw-arbor Q is journaled in a frame R, which supports an adjustable hood S, extending over the edge of the saw Q′, and to the side of the hood S is attached the handle T, by means of which the swinging frame is operated. The arbor-holding frame R is adjustably secured to the hollow frame C by means of the parallel bars or tubes V V, which are screw-threaded at their lower ends and secured to the frame R by means of the nuts *v* and *v*′, and in order to provide for the proper guidance of the parallel bars V V within the cavity of the hollow frame C and for clamping the bars in their adjusted position the semicylindrical Babbitt-metal seats W W are provided in the frame C by pouring the molten metal into prepared cavities formed between the inserted bars V V of the frame R and the adjacent wall of the frame C, as shown in the cross-section, Fig. 3, the said bearing-seats W W being formed at each side of the rings X X, which fit the cylindrical surface of the bars V V and serve to clamp the said bars firmly against the said bearing-seats W W by means of the integral bolt Y at one side of the ring and the nut Z.

I claim as my invention—

In a swing sawing-machine, the combination of the hollow swinging frame provided with the bearing-seats within the cavity of the frame, with a saw-arbor frame provided with the parallel bars adjustably held in the cavity of the pivoted frame, and the ring-bolts adapted to clamp the parallel bars to their bearing-seats, substantially as described.

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Witnesses:
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