JAMES MAYDWELL.

Machine for Sawing Stone.

No. 126,068. Patented April 23, 1872.

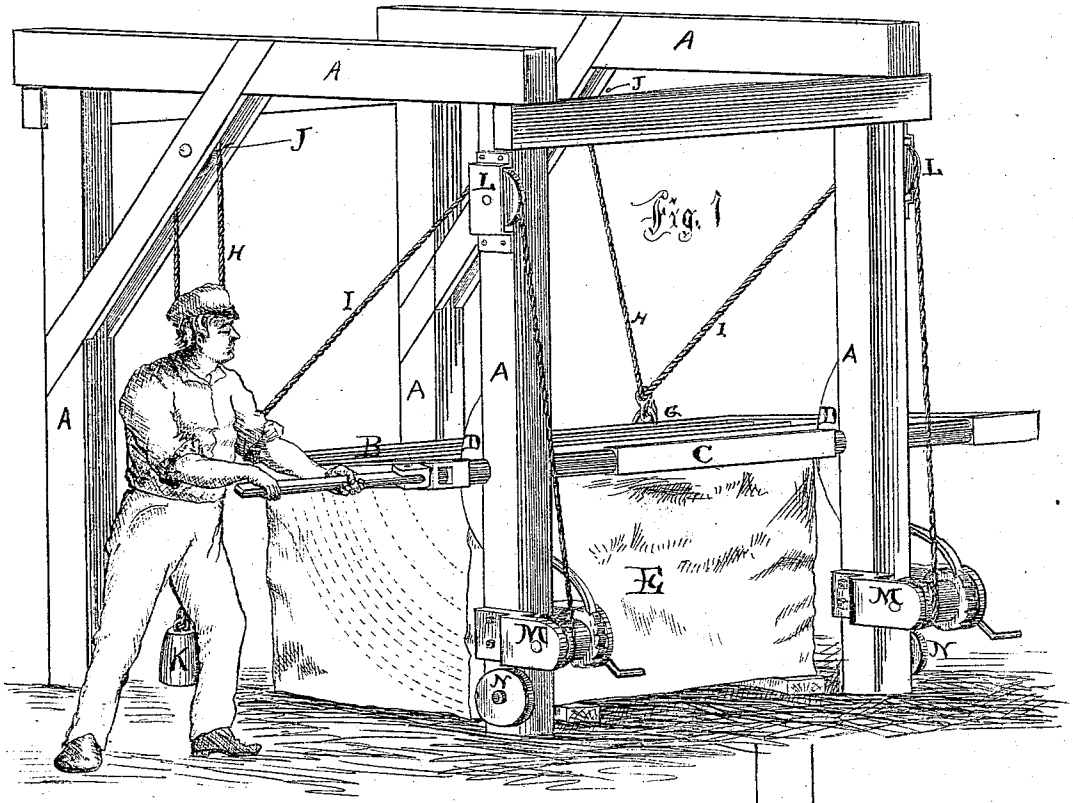

Fig. 1

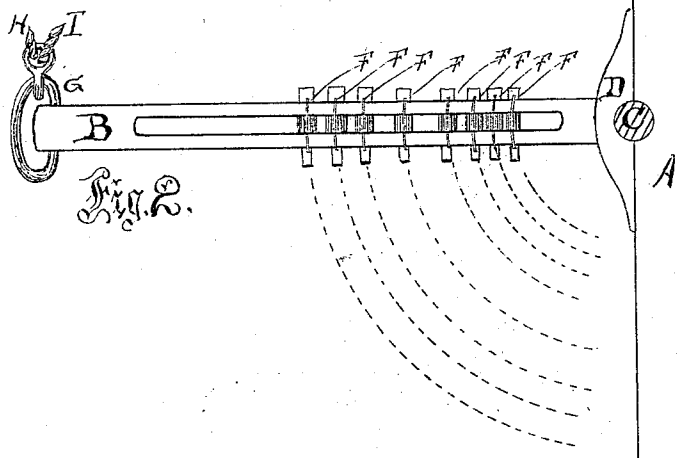

Fig. 2.

Witnesses

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126,068

UNITED STATES PATENT OFFICE.

JAMES MAYDWELL, OF MEMPHIS, TENNESSEE.

IMPROVEMENT IN MACHINES FOR SAWING STONE.

Specification forming part of Letters Patent No. 126,068, dated April 23, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, JAMES MAYDWELL, of Memphis, in the county of Shelby and State of Tennessee, have invented a new and useful Improvement in Machines for Sawing Stone; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of my machine in operation. Fig. 2 is an end elevation, showing the manner of hanging the saw-frame.

My invention consists in constructing and arranging the saw-frame so that as the saws advance in their cuts they shall advance in arcs of concentric circles, and thereby convert the stock into curved slabs.

That others may fully understand my invention I will particularly describe it.

The frame A may be constructed in the ordinary way, and the saw-frame B may be also constructed in the ordinary manner—that is to say, so that the saws may be adjusted back and forth, as may be desirable, to produce slabs of the required thickness, as shown in Fig. 2. At one side the saw-frame is attached to the bar C, which is made cylindrical, and mounted in boxes D, attached to the upright posts of the frame A at one side. The frame B and bar C are moved back and forth to reciprocate the saws, the bar C sliding in the boxes D. As the saws penetrate the block of stone E the saw-frame B advances the saws in arcs of circles concentric with the axis of bar C in the boxes D, and the block of stone is thereby separated into slabs curved, as shown by dotted lines in Figs. 1 and 2, said slabs being adapted to corners and other places where curved slabs may be desirable. In order not to cause the saws F to bind in the cut they are curved in cross-section to correspond with the desired curvature of the cut, as shown in Fig. 2. The outer edge of the saw-frame B is provided with clips G, to which are attached ropes H I. The ropes H pass over pulleys J, and are attached to balancing-weights K to regulate the pressure of the saws in the cut. The ropes I are passed over pulleys L and around the winches M, for the purpose of hoisting the outer edge of the saw-frame to remove the saws from their cuts. When the saw-frame has descended so far that its weight is insufficient to give the required pressure of the saw in the cut, the ropes I may be transferred from the pulleys L to the pulleys N, and the winches can then be employed to increase the pressure in the cuts.

Having described my invention, what I claim as new is—

1. The saw-frame B, hung to the sliding bar C, which is mounted in the boxes D, attached to the uprights of the frame A, substantially for the purpose set forth.

2. The combination of the swinging saw-frame B, ropes I, and winches M, substantially for the purpose set forth.

3. The saws F, with curved cross-section corresponding to the arcs of the concentric circles in which they act, substantially as set forth.

JAMES MAYDWELL.

Witnesses:
P. M. WINTERS,
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