(No Model.) 2 Sheets—Sheet 1.

J. PECKOVER.

MACHINE FOR SAWING STONE.

No. 330,614. Patented Nov. 17, 1885.

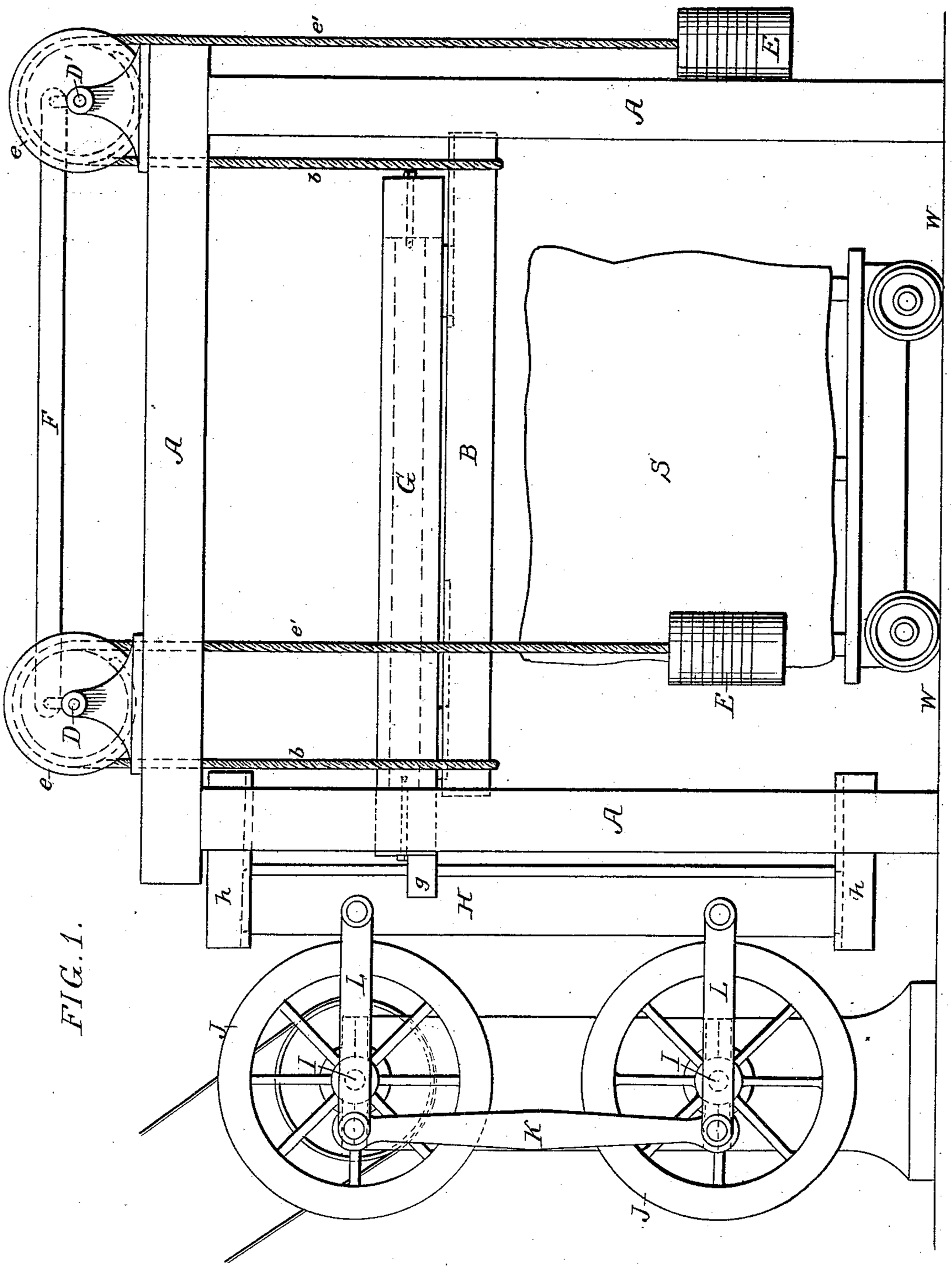

FIG. 1.

Witnesses:
Hamilton O. Turner.
William F Davis

Inventor:
James Peckover
by his Attorneys:
Howson and Sons

(No Model.) 2 Sheets—Sheet 2.

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FIG. 3.

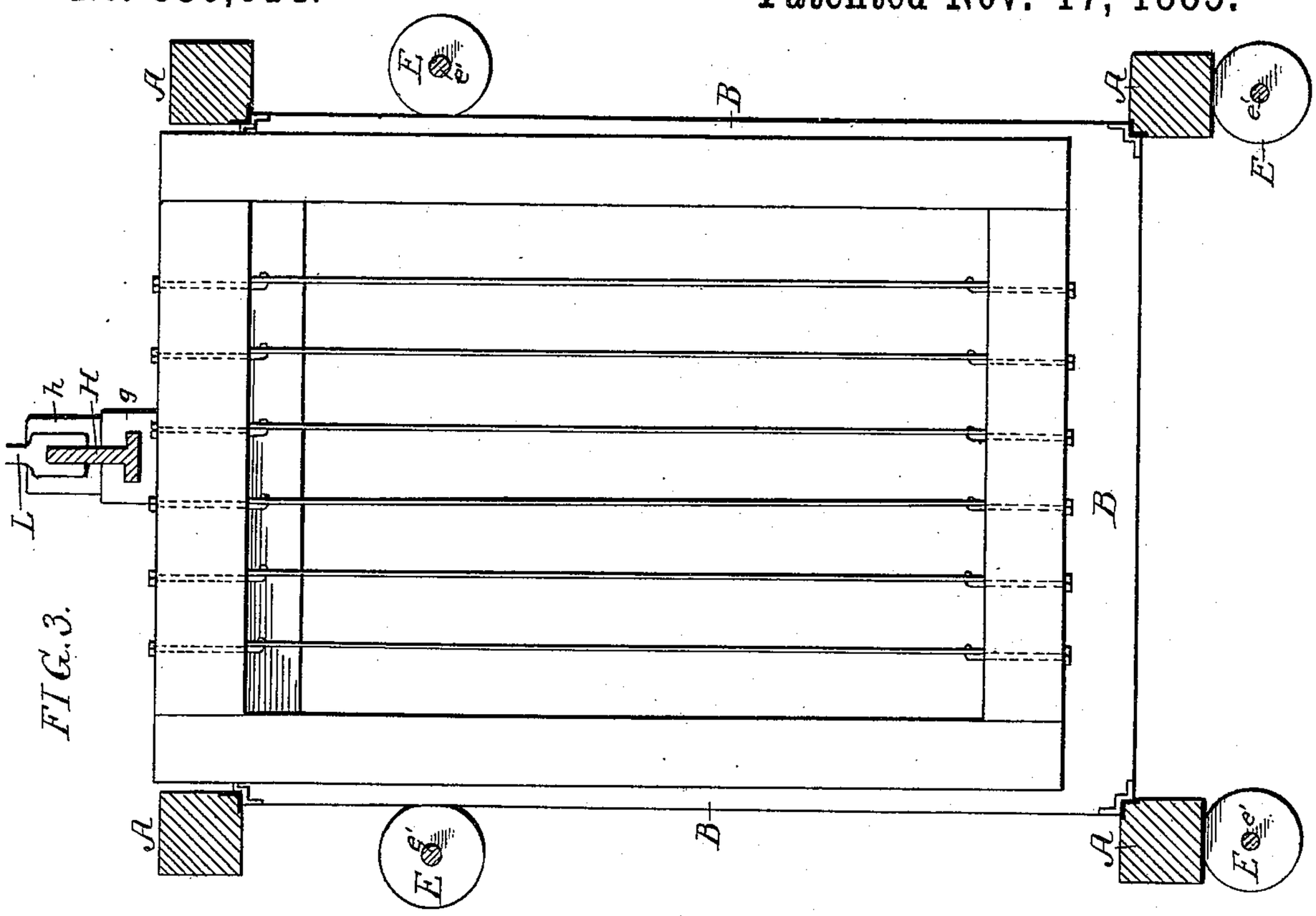
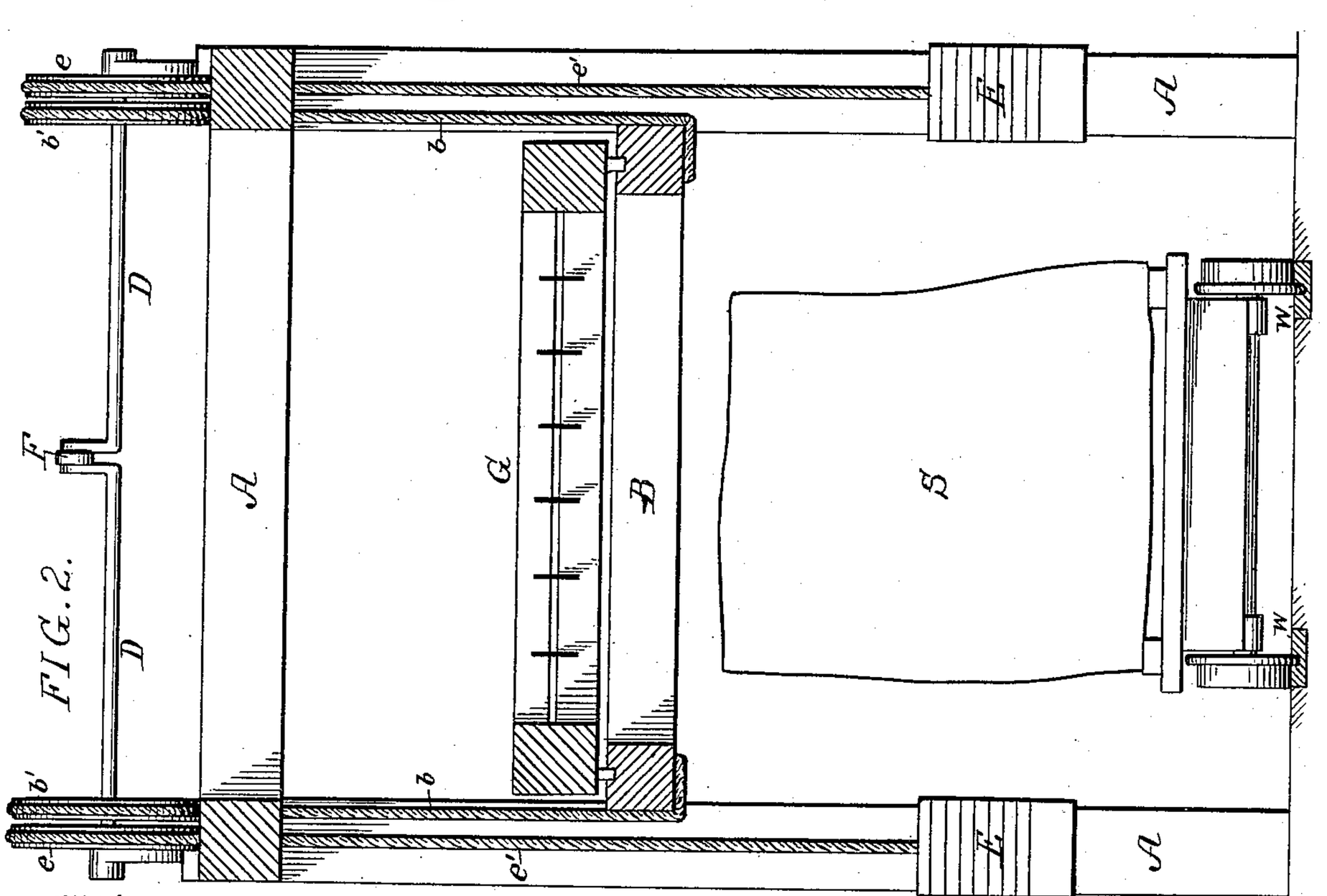


FIG. 2.



Witnesses:
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William F Davis

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UNITED STATES PATENT OFFICE.

JAMES PECKOVER, OF PHILADELPHIA, PENNSYLVANIA.

MACHINE FOR SAWING STONE.

SPECIFICATION forming part of Letters Patent No. 330,614, dated November 17, 1885.

Application filed August 31, 1885. Serial No. 175,733. (No model.)

To all whom it may concern:

Be it known that I, JAMES PECKOVER, a subject of the Queen of Great Britain and Ireland, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Machines for Sawing Stones, of which the following is a specification.

My invention consists of certain improvements in the construction of machines for sawing stones, one of the main objects of my invention being to obtain a direct linear motion of the saw-frame during all periods of the work, as fully described hereinafter.

In the accompanying drawings, Figure 1 is a side view of my improved stone-sawing machine. Fig. 2 is a vertical transverse section; and Fig. 3 is a sectional plan.

A is the main fixed frame, consisting, in this instance, of four vertical posts, two longitudinal stringers at the top, and transverse connecting-posts. Guided on the four vertical posts of the fixed frame is a vertically-adjustable carriage-bed, B, consisting of an open rectangular frame, to the corners of which are connected vertical supporting chains or ropes, *b*, which pass up over pulleys *b'* on two horizontal shafts, D D', the ends of the chains or ropes being connected to the pulleys. On the same shafts, D D', are pulleys *e*, around which pass chains or ropes *e'*, carrying counter-weights E for the carriage-bed B, the upper ends of these cords *e'* being connected to the peripheries of the pulleys *e*. The counter-weights E are made variable by the removal of portions of the weights to properly counterbalance the carriage-bed and saw-frame according to the number of saws employed. In order to insure the counter-weights acting together to raise and lower the carriage-bed in truly horizontal planes, I crank the two shafts D D' and provide a connecting-rod, F, so that the two shafts must operate together. On ways on the carriage-bed traverses the saw-frame G, which consists of the usual rectangular frame, having any desired number of saws adjustably secured thereto. One end of this frame G is provided with a lug, *g*, having a vertical T-slot fitting over a vertical T-bar, H, which is guided at the top and bottom in ways *h*, secured to the fixed frame. To this bar are pivoted two links, L, connecting the bar to cranks on shafts I I, mounted in bearings on a suitable frame and having fly-wheels J. The cranks of the shafts are connected by a rod, K, so that they shall move in unison and impart a uniform movement to both ends of the bar H. Rotary motion may be imparted to either of the shafts I by a belt passing over suitable pulleys, as indicated. The stone S to be sawed is mounted on a suitable truck adapted to travel on ways W, running between the upright posts of the frame.

It will be seen that by the above construction, and more particularly the combination of the carriage forming ways for the saw-frame with the vertical bar H, to which the saw-frame is connected so as to move therewith but be free to slide lengthwise thereon, in all positions of this carriage and saw frame and at all parts of its work, the pull on the saw-frame is always a direct linear motion, whereas with most other constructions of sawing-machines there is a tendency to an angular pull on the saw-frame, either at the beginning or at the end of its work.

I claim as my invention—

1. The combination of the fixed frame of the machine and vertically-adjustable carriage-bed with a reciprocating bar, H, and the saw-frame G, guided on the said carriage and connected to the reciprocating bar to move therewith, but free to slide lengthwise on the bar.

2. The combination of the fixed frame and adjustable carriage-bed with a reciprocating bar, H, operating crank-shafts and links, and the saw-frame mounted on the carriage and connected to the reciprocating bar to move therewith, but free to slide lengthwise thereon, substantially as set forth.

3. The combination of the fixed frame and carriage-bed carrying the traversing saw-frame with suspending chains or ropes, crank-shafts carrying pulleys, over which the said chains or ropes pass, counter-weights, and a rod connecting the two crank-shafts, substantially as specified.

4. The combination of the fixed frame and an adjustable carriage-bed with a saw-frame mounted on said carriage-bed, and having a

T-slot and an upright reciprocating T-bar attached to the slot, substantially as specified.

5. The combination of the traversing saw-frame having a T-slot with a guided T-bar adapted thereto, two crank-shafts, and links connecting the cranks with the said bar, all substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES PECKOVER.

Witnesses:

WILLIAM F. DAVIS,

JOHN E. PARKER.