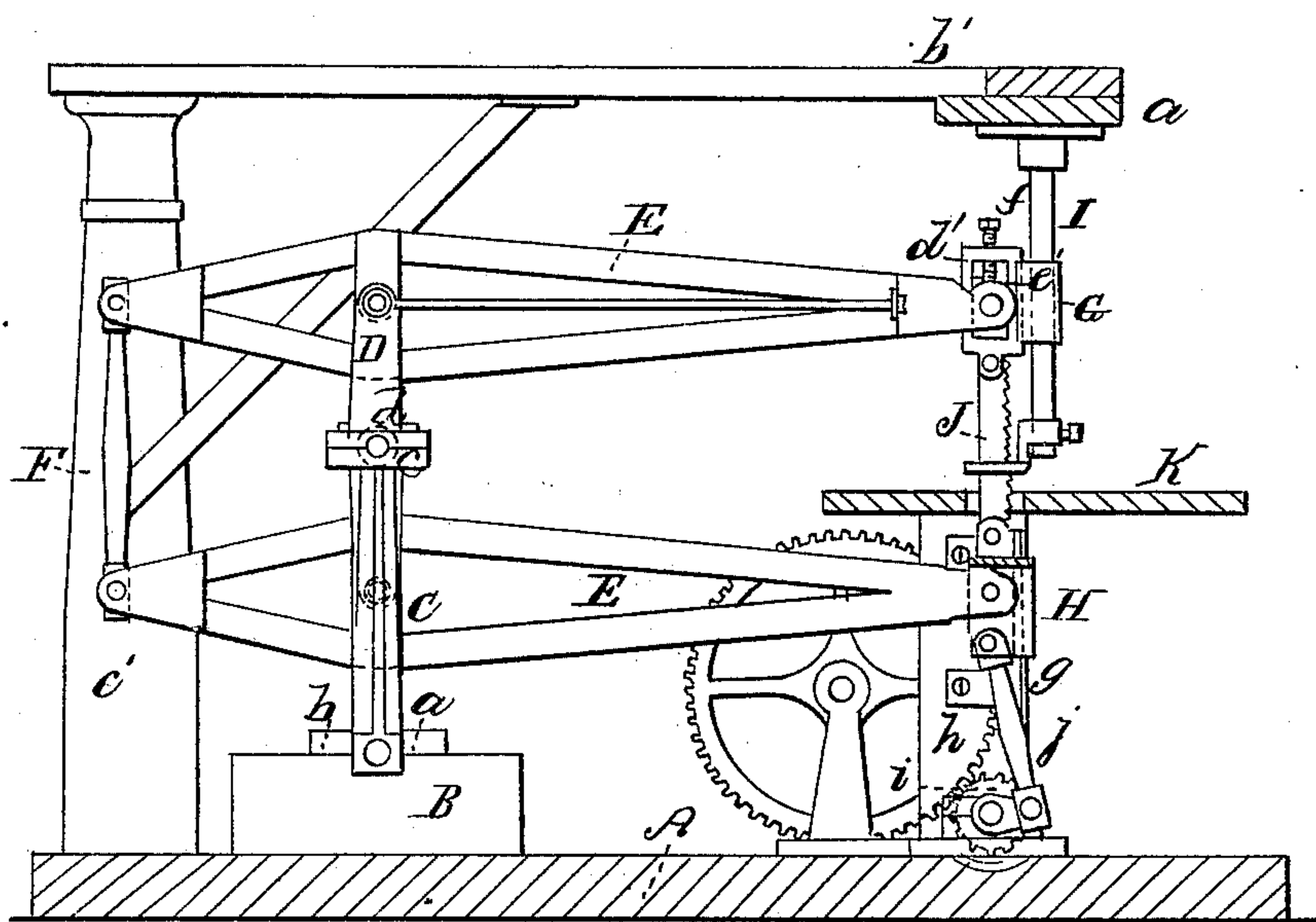


J. Storrell,
Scroll Sawing Machine,
No 16,295, Patented Dec. 23, 1856.



UNITED STATES PATENT OFFICE.

JOHN STOWELL, OF CHARLESTOWN, MASSACHUSETTS.

METHOD OF HANGING RECIPROCATING GIG-SAWS.

Specification of Letters Patent No. 16,295, dated December 23, 1856.

To all whom it may concern:

Be it known that I, JOHN STOWELL, of Charlestown, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Mode of Hanging Reciprocating Saws, the kind usually termed "Gig" or "Muley" Saws; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, said drawing being a side view of my improvement, the framing which supports the working parts being bisected vertically and longitudinally through the center.

My invention consists in attaching the ends of the saw to parallel levers, the axes of which are placed in an oscillating frame, the journals of said frame being fitted in a swinging frame, and the whole arranged as will be hereinafter fully shown and described, whereby the saw may be strained with the greatest facility and in a perfect manner and also made to work in a perfectly vertical direction, or in a vertical right line.

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

A represents a base or platform on which two blocks B, are secured, and C, is a frame having journals *a*, at its lower end, said journals working in bearings *b*, on the blocks B. On the upper part of the frame C, there are placed bearings *c*, one at each side, the bearings *c*, receiving the journals *d*, of a frame D. The journals *d*, of the frame D, are on the ends of a shaft which passes through the center of the frame.

E, E, represent two levers which are placed one in the upper and the other in the lower part of the frame D, the axes of the levers being fitted between center points in the frame D. These levers are connected at one end by a rod F, the ends of which are pivoted to the levers. The opposite ends of the levers are attached to guides G, H. The guide G, to which the upper lever is attached, works on a pendent rod I, attached to a horizontal beam *a*¹ which is secured at the ends of two horizontal beams *b*¹, said beams being secured to the upper ends of vertical posts *c*¹, attached to the base or platform A. To the guide G, a gallows *d*¹, is attached and this gallows has a rectangular block *e*, fitted within it, the end of the upper lever being secured to this block by a bolt which passes horizontally through

said block. Through the upper part of the gallows *d*¹, a screw *f*, passes and the lower end of this screw is attached to the block *e*. The guide A is fitted and works between ways *g*, attached to uprights *h*, on the base A, and the end of the lower lever E, is secured in this guide.

J, represents the saw, the upper end of which is secured to the lower end of the gallows *d*¹, the lower end of the saw being secured to the upper end of the guide H.

K, represents a table or bed attached to the upper ends of the uprights *h*, the saw working through a slot in the bed. The saw is driven by the usual crank *i*, and connecting rod *j*.

From the above description of parts it will be seen that as the saw is operated, the two levers E, E, work parallel with each other and the saw is allowed to work in a vertical right line in consequence of the oscillating and forward and backward movement of the frames C, D, said frames compensating for the curvilinear movement of the levers E, E. Instead of the frame C, however, the journals of the frames D, may be fitted in grooves so as to allow them to slide or play forward and backward to a certain extent; the same effect would in this case be obtained. The saw is strained by merely turning the screw *f*.

The above invention is extremely simple and operates practically well and the saw is kept perfectly strained at all points of its stroke or movement.

This method of hanging the saw gives much more room on the bed or table than when the saw is hung in a gate, in the usual way, and also requires less power to work it.

I do not claim attaching the ends of the saw to the two levers E, E, for this device or its equivalent has been previously used, but

What I claim as new and desire to secure by Letters Patent, is—

Attaching the saw J, to the two levers E, E, when the axles of said levers are fitted in an oscillating frame D, the journals of which are fitted in slots or grooves or in a swinging frame C, to allow a forward and backward movement of the frame D, substantially as described for the purpose specified.

JOHN STOWELL.

Witnesses:

D. F. WHITE,
EDWARD STOWELL.