A. P. Conant,

Saw-Mill Head-Block.

No. 50,223. Patented Oct. 3, 1865.

Fig 1

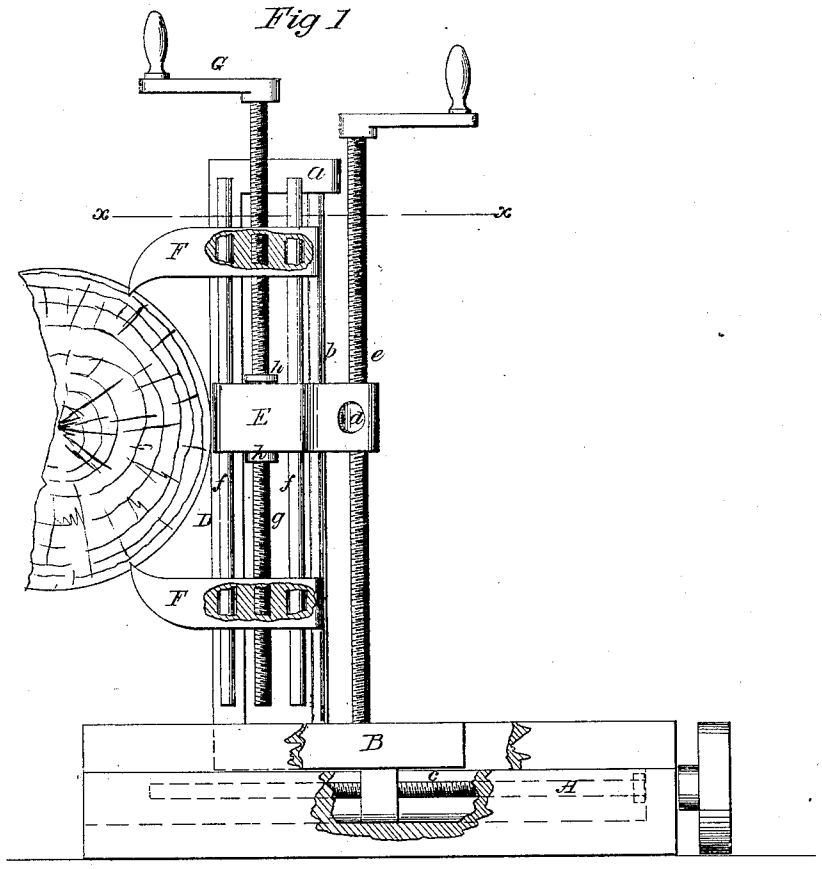
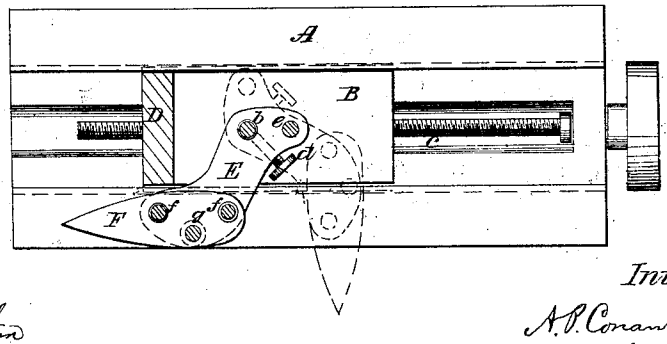


Fig 2



Witnesses:

J. McCrayton

Thos Fusco

Inventor.

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By Munn & Co

Attys

UNITED STATES PATENT OFFICE.

A. P. CONANT, OF SMITHLAND, KENTUCKY.

IMPROVEMENT IN SAW-MILLS.

Specification forming part of Letters Patent No. **50,223**, dated October 3, 1865.

To all whom it may concern:

Be it known that I, A. P. CONANT, of Smithland, in the county of Livingston and State of Kentucky, have invented a new and Improved Head-Block for Saw-Mills; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side elevation of this invention, partly in section. Fig. 2 is a horizontal section of the same, the line *x x*, Fig. 1, indicating the plane of section.

Similar letters of reference indicate like parts.

This invention consists in the arrangement of two dogs, which are adjustable according to the width or thickness of the log to be clamped between them, and which are guided by rods secured in the end of a swinging head, which can be raised or lowered on a standard rising from the head-block, and which also allows of being turned in a horizontal plane in such a manner that by raising and lowering the head the position of the dogs can be readily adjusted to suit the diameters of different saws or the size and shape of different logs or pieces to be sawed, and by turning said head the dogs can be swung back out of the way or forward in their working position, and the operation of adjusting the log in the proper position for sawing is greatly facilitated.

A represents the head-block of a sawing-machine, which is made adjustable on the carriage in the usual manner, and which is provided with a slide, B, that moves in a suitable guideway in the head-block, and to which a reciprocating motion is imparted by a screw-spindle, C, or by any other suitable means.

From the slide B rises a standard, D, which is provided on its top with a flange or bracket, *a*, and a rod, *b*, is secured with its upper end in said bracket and with its lower end in the slide, as shown in Fig. 1 of the drawings. This rod is round and of uniform thickness from top to bottom, and it forms the guide for the head E, which is so arranged that it can turn freely in either direction on the rod *b*, and which is provided with a set-screw, *d*, and with an adjusting-screw, *e*. The set-screw passes edgewise through the hand and serves to secure said head in the desired position, and the adjusting-screw extends down through the head in a direction parallel with the guide-rod *b*, and it serves to raise or lower the head. The lower end of this adjusting-screw bears on the surface of the slide without, however, passing into the same, so that it does not interfere with the revolving motion of the head.

Firmly secured in the head E are two rods, *f*, which form the guides for the dogs F, and a screw-spindle, *g*, serves to adjust these dogs closer together or farther apart, as may be desirable. Said screw-spindle passes freely through the head, and two collars, *h*, are fastened together, one above and the other below the head, to prevent it from moving in a direction parallel with its axis. One half of the screw-spindle is provided with a right-handed and the other with a left-handed screw-thread, and it is tapped into the dogs F, as indicated in Fig. 1 of the drawings. A crank or hand-wheel, G, serves to turn the screw-spindle, and by turning the same in one direction the dogs close up and by turning it in the opposite direction the dogs open. By these means the dogs can be readily adjusted to suit the log or piece to be sawed. Said log or piece can be firmly clamped and raised or lowered bodily while in the dogs, and if the dogs are not required they can be readily and conveniently swung out of the way.

This improvement is applicable to the head-blocks of saw-mills of any description, and facilitates the operation of adjusting the log or other piece to be sawed in relation to the saw.

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

The vertically-adjustable revolving head E, provided with guide-rods *f* and screw-spindle *g*, in combination with dogs F and with the head-block A of a sawing-machine, constructed and operating substantially as and for the purpose set forth.

The above specification of my invention signed by me this 28th day of June, 1865.

A. P. CONANT.

Witnesses:

M. M. LIVINGSTON,

C. L. TOPLIFF.