F. W. Shelley,

Head Block.

No. 107,966. Patented Oct. 4, 1870.

Fig. 1.

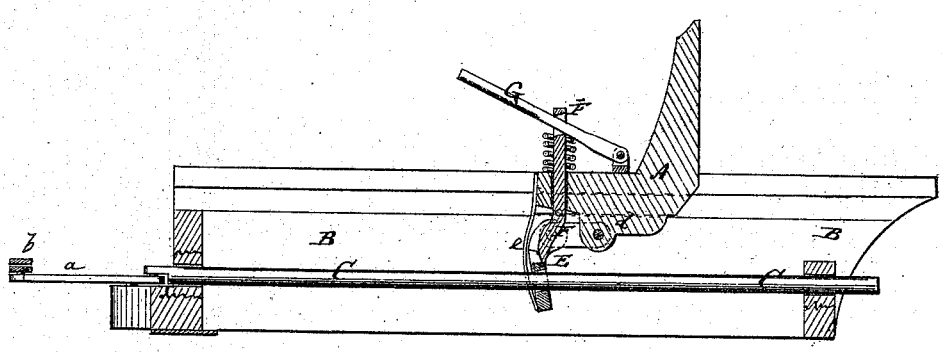
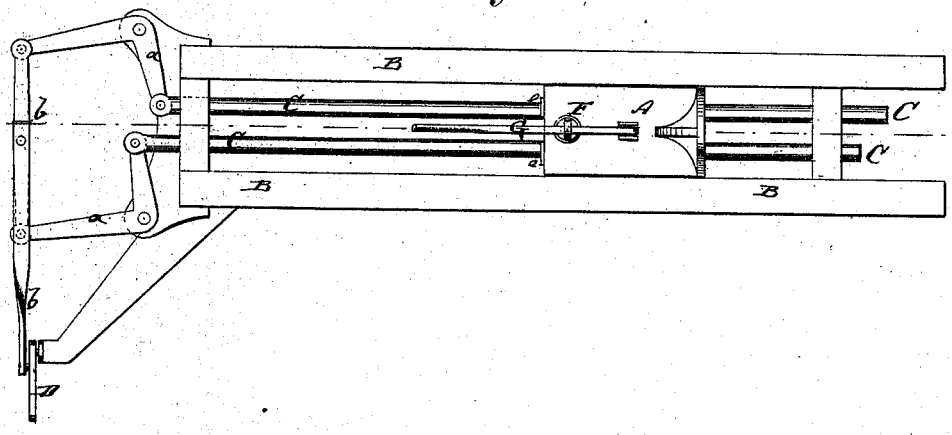


Fig. 2.



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UNITED STATES PATENT OFFICE.

FRANKLIN W. SHELLEY, OF MUNCIE, INDIANA.

IMPROVEMENT IN HEAD-BLOCKS FOR SAW-MILLS.

Specification forming part of Letters Patent No. **107,966**, dated October 4, 1870.

To all whom it may concern:

Be it known that I, FRANKLIN W. SHELLEY, of Muncie, in the county of Delaware and State of Indiana, 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.

Figure 1 represents a vertical longitudinal section of my improved head-block. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new apparatus for imparting motion to the head-blocks of circular and other saw mills.

The invention consists, chiefly, in the application of a series of friction-levers, which are operated by a pair of sliding bars, so as to impart the necessary intermittent forward motion to the block.

A in the drawings represents the head-block. B is the frame on which the same slides.

C C′ are two parallel horizontal bars, pivoted at their rear ends to bell-cranks *a a*, which are connected with each other and with a lever, D, by means of a jointed rod, *b*. By oscillating the lever D the bars C C will be moved longitudinally backward and forward in opposite directions. The bars C C rest in the front and back ends of the frame B, and are in the same always guided parallel.

To an ear, *d*, which projects from the under side of the head-block, are pivoted two jointed levers, E E, whose lower members are perforated to embrace the bars C C, respectively. Some springs, *e*, which project downward from the head-block, hold the lower members of the levers E forward in an inclined position, so that the upper back edges of their apertures bite against the rods C. Whenever a rod, C′, is moved forward it will be locked, together with its levers E, to carry the head-block forward with it, while during the backward motion of each bar C the same slides loose through the apertures of E without affecting the position of the head-block. Thus, during every motion of the lever D the forward-moving bar C will feed the head-block forward.

F is a sliding wedge suspended from a lever, G, which is pivoted to the head-block. When the lever G is swung down, the wedge will force the outer members of the levers E back, to cause them to release the bars C. The head-block can then be moved backward. The joint in each lever E allows the same to adjust themselves to inequalities of the bars C.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The reciprocating bars C C, operated by the lever D, and combined with the perforated levers E E and head-block A, for feeding the latter, as set forth.

2. The levers E, combined with the springs *e*, and jointed, as described, for the purpose of communicating forward motion to the head-block from the reciprocating bars C, as set forth.

3. The wedge F and lever G, arranged on the head-block for the purpose of throwing the levers E out of gear, as set forth.

FRANKLIN W. SHELLEY.

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