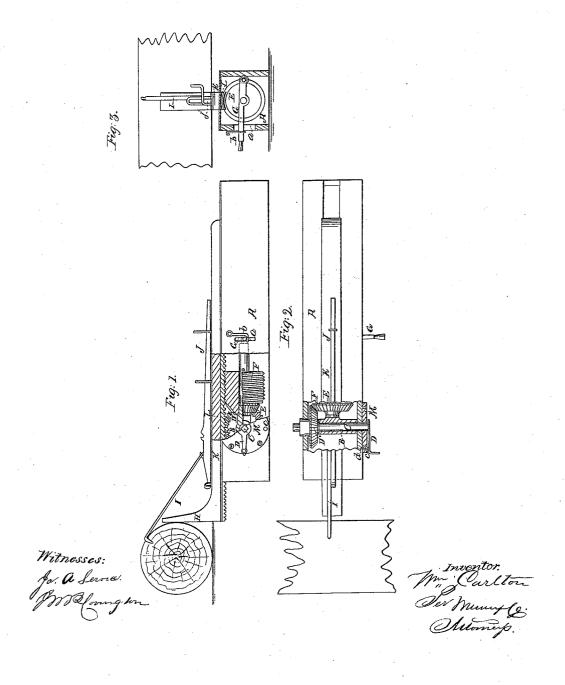
# W. Carlton, Sam-Mill Head-Block.

JY=63,015.

Patented Mar. 19, 1861.



## Anited States Patent Office.

## WILLIAM CARLTON, OF DUNKIRK, NEW YORK.

Letters Patent No. 63,015, dated March 19, 1867.

### IMPROVEMENT IN HEAD-BLOCKS FOR SAW-MILLS.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM CARLTON, of Dunkirk, in the county of Chautauqua, and State of New York, 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 is a side view of my invention partly in section.

Figure 2, a plan or top view of the same partly in section.

Figure 3, a transverse vertical section of the same, taken in the line x x, figs. 1 and 2.

Similar letters of reference indicate like parts.

This invention relates to a new and improved head-block for saw-mills, and it consists in the means employed for adjusting the knees or standards against which the log to be sawed bears, and by which means the log is set to the saw.

A represents a head-block, which is attached to a log-carriage in the usual way, to wit, secured transversely upon it. This head-block is hollow or constructed like a box, and has a sleeve, B, fitted transversely in it, through which a shaft, C, passes and is allowed to turn freely, said shaft being turned by means of a crank, D, at the outer side of the head-block.

On the shaft C, within the head-block, there is keyed a bevel-wheel,  $D^*$ , into which a similar wheel, E, gears, the latter being at the front end of a serew, F, placed longitudinally within the head-block, and having its front bearing in the sleeve B, the rear bearing being in a lever, G, one end of which passes through a vertical slot, a, in the side of the head-block, and is retained in position by a hook, b.

H represents the knee or standard, against which the log to be sawed is secured by a dog, I, said dog being attached by a hook connection to a lever, J, secured upon the upper surface of a slide, K, to which the knee or standard H is secured at one end. This slide has a rack, L, at its under side, into which the serew F gears, as shown clearly in fig. 1.

To the side of the head-block, over which the crank D works, there is attached a circular plate, M, having holes, c, made in it near its periphery, at equal distances apart, to receive a pin, d, on the crank D. This plate M is concentric with the shaft C, and four holes, c, are made in it to secure the crank D at each quarter turn or revolution, if desired.

From the above description it will be seen that by turning the shaft C the serew F will be rotated through the medium of the bevel gears D\* E, and the serew, in consequence of gearing into the rack L at the under side of the slide K, will move the standard or knee H. and set the log to the saw, the log being moved at different distances, according to the thickness of the stuff to be sawed, by turning the crank D a quarter, half, three-quarters, or a complete revolution, as may be required.

In dogging the log to the knee or standard, the lever J is raised, the outer end of the dog driven in the log, and the lever J pressed down and secured by a fastening, N, arranged in any proper way.

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

The gear which operates the knee of a head-block, consisting of the bevel-wheels D\* E, worm F, rack L, sleeve B, and lever G, arranged and operating substantially as described for the purpose specified.

WILLIAM CARLTON.

Witnesses:

THOMAS HARPER, HENRY STIRLING.