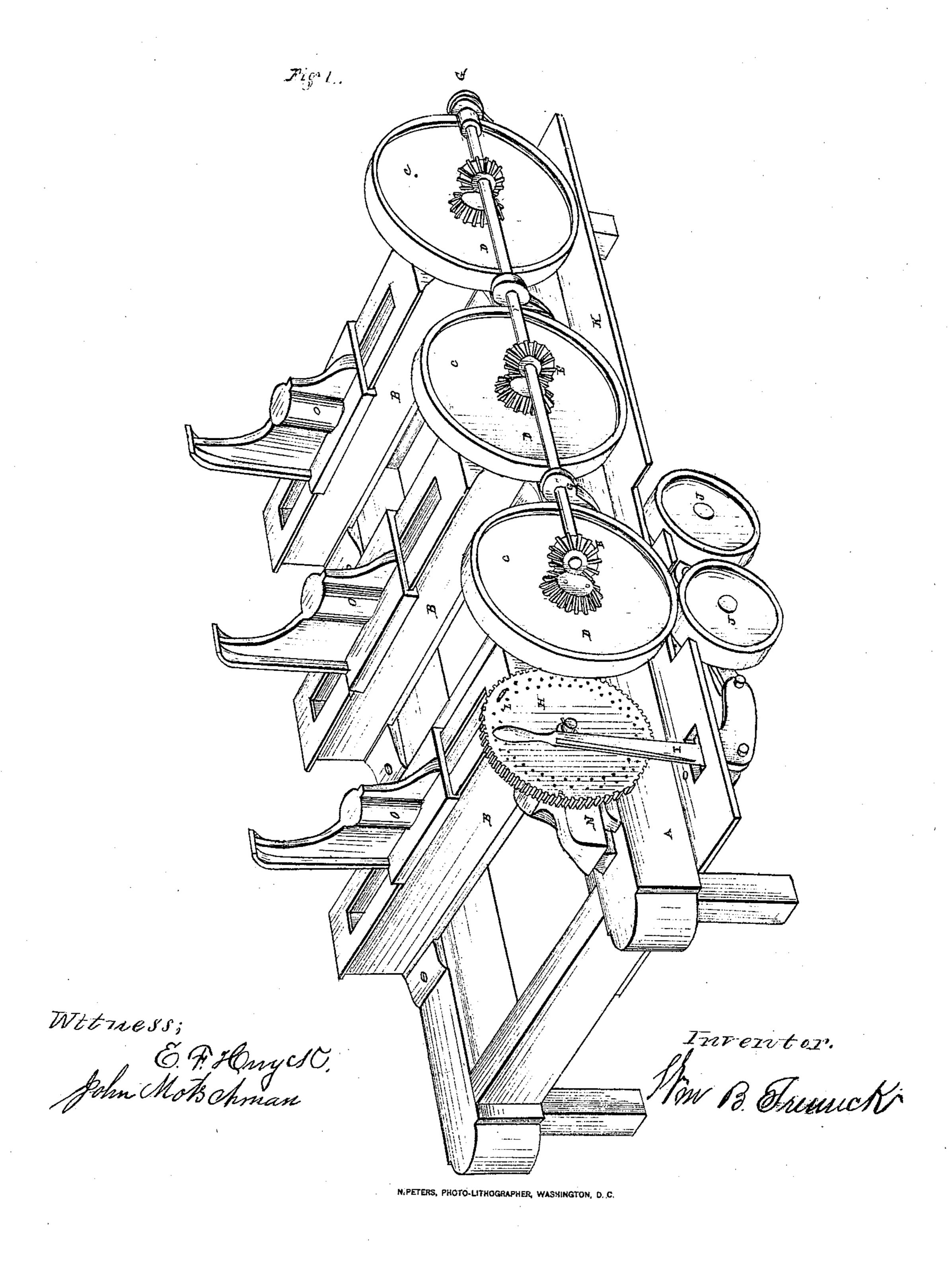
M.B. Trunich,

Saw Mill Head Block.

No. 106,744.

Talente

Palented Aug. 23. 1870.



Anited States Patent Office.

WILLIAM B. TRUNICK, OF LOUISVILLE, KENTUCKY, ASSIGNOR TO NATHANIEL B. CONNEL, OF SAME PLACE.

Letters Patent No. 106,744, dated August 23, 1870.

IMPROVEMENT IN HEAD-BLOCKS OF SAW-MILLS.

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

I, WILLIAM B. TRUNICK, of the city of Louisville, county of Jefferson and State of Kentucky, have invented a certain new and useful Improvement in Setting Logs and Operating the Head-Blocks of Circular-saw Mills, of which the following is a specification.

The first part of my invention consists in providing each screw of the head-blocks with a friction-pulley, made of cast-iron, of any suitable size, keyed on securely, on the outside of which there is small bevel or miter-wheel, keyed on the end, which works into similar wheels on a small shaft secured to the side of the carriage, extending from one head-block to the other, there being usually three in number, and made stationary, so that, when power is applied to any one, it is transmitted to all equally alike, which is done by means of stationary friction-pulleys, placed in the floor below the carriage, and driven from the engine below by bands or otherwise, the motion of each being the reverse. The outside bearings of the shafts of these pulleys are made in the ends of an oscillating lever, secured to the mill-frame at the center, one end of which connects with the arm of a small lever running up through the floor at any convenient place, to be operated by the person attending the saw. And in order to operate this invention, it is only necessary | to state that, as all the head-blocks are stationary on the carriage, the main one is so set as that the pulley on the screw will be immediately over the driving friction-pulley in the floor when the saw runs out, when it is only necessary to raise it against the pulley on the head-block, and it will move the log until checked by the pin in a wheel hereafter mentioned; but when necessary to reverse the motion to back the carriage, raise the other pulley, which will back it; or, when necessary to put on a log, any of the pulleys on the different head-blocks can be used in like manner.

The second part of my invention consists in a small pinion on the screw of the main head-block, immediately behind the friction-pulley, working into a large wheel secured to a block sliding on top of the carriage, in order that it may be thrown out of gear. This last-named wheel is perforated with numerous holes, in which a small pin is used for gauging, and as a check to the machinery, and may be made of any required size or number of cogs, or any number of holes to suit the different thicknesses of lumber required to be cut, the object of the holes in the wheel being for the purpose of inserting a small pin in them to act as a gauge for the thicknesses of the lumber by being changed from one hole to the other, and, at the same time, to operate as a check to prevent the pulleys from turning too far, so as to gauge incorrectly. The end of the pin is so arranged as to strike a stop on top of the carriage on the opposite side of the wheel; but when it is necessary to operate the head-blocks in putting on a log, this wheel is thrown out of gear for the time being.

It will be seen, by reference to the drawing, that the part to which the driving-pulleys are attached is secured permanently to the under side of the carriage; but it is not so intended when in practical use, but merely represents the floor of the mill, on which the carriage runs when provided with ways for that purpose.

Having thus fully described my invention, a more perfect understanding of which may be had by reference to the drawing, in which—

Figure 1 represents a view of the machine complete.

A is the carriage-frame, which is made of wood.

B B are the head-blocks, which are usually made of cast-iron.

O O O are the sliding heads of the same.

C C C are the friction-pulleys by which they are operated.

D D D are miter-wheels, by which power is transmitted to the connecting-shaft.

F is the connecting-shaft.

E E are the wheels by which it is driven.

G G are the bearings of the shaft.

J J are the friction-pulleys, by which the machine is driven.

I is the lever, by which the pulleys J J are operated.

k is the floor of the mill. Although it is here attached to the carriage, it is not so intended to be when in use.

H is the gauge-wheel for regulating the thickness of the lumber.

N is the sliding-block. P are the holes; and

L is the gauge-pin, which is changed from one hole to the other in the wheel, according to the thickness of the lumber to be cut.

Having thus fully described the drawing, therefore I do not claim anything as new in the carriage-frame or the sliding head-blocks; but

What I claim as my invention, and desire to secure

by Letters Patent, is-

1. The pulleys C C C and wheels D D D, the shaft F, with its wheels E E E and stands G G, in combination with the head-blocks B B, the friction-pulleys J J, and lever I, by which they are operated, substantially as and for the purpose hereinbefore set forth.

2. The wheel H, with its slide-block N, holes P, and pin L, for gauging the lumber, substantially as and for the purpose hereinbefore set forth.

WM. B. TRUNICK.

Witnesses:

E. F. HUYCK, JOHN MOTSCHMAN.