

October 25, 1913.

DRAWING

2,444

A careful search has been made this day for the original drawing or a photolithographic copy of the same, for the purpose of reproducing the said drawing to form a part of this book, but at this time nothing can be found from which a reproduction can be made.

Finis D. Morris,

Chief of Division E.

AWK

# UNITED STATES PATENT OFFICE.

R. COOK AND S. E. BURNHAM, OF SARATOGA SPRINGS, NEW YORK.

## MODE OF STRAINING SAWS FOR SAWMILLS.

Specification of Letters Patent No. 2,444, dated February 1, 1842.

*To all whom it may concern:*

Be it known that we, RANSOM COOK and SYLVESTER E. BURNHAM, of Saratoga Springs, in the county of Saratoga and State of New York, have invented a new and useful Improvement in Sawmills, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is an elevation of the fender posts, gate, and saw. Fig. 2 is a side view of the upper straps and part of the saw.

Similar letters refer to corresponding parts.

The fender posts A A and connecting bars B B are united by screw bolts D passed through oblong slots so that the fender posts may be brought nearer to or removed farther from each other as may be required. Four cast iron or other metallic ribs E are secured to the inside of the fender posts over which the gate moves. These ribs are formed with chambers for oil in the manner hereafter described.

The saw gate is made in the following manner. The sides F are hollow and composed each of four boards united together so as to form square tubes, the two side planks of which being extended beyond the ends of the other two boards so as to form mortises or spaces for the reception of the ties G which project beyond the said hollow sides and are secured thereto by pins or bolts or other suitable fixtures. In the projecting ends of the cross ties are made grooves, which are lined with metallic plates to prevent wearing, corresponding with the ribs on the fender posts on which they move, which plates may be set farther out as they wear by small pieces of wood or paper inserted behind them. These plates are turned at right angles at the ends so as to lap over the edges of the ties. By having these four short ribs and grooved ties the friction is reduced which will cause the gate to run much easier than in the use of the continuous grooves, and the sides being made hollow decreases the weight of the gate and

causes it to move with much less friction. The saw is strained by means of four stirrups H arranged in pairs two above and two below to which are attached four plates I by pins on which they move as joints in order to give them free play, said plates coming against four transverse plates K riveted to the ends of the saw for straining the back and front of the saw to any degree required. The stirrups have each a screw and nut L for drawing them toward the cross ties of the gate and thus straining the saw. By turning those at the back, the back of the saw will be strained. By turning those at the front the cutting edge will be strained and by turning all together the whole saw will be strained. By this arrangement the saw may be strained equally and not more at the center than at the edges. The aforesaid nuts turn upon horizontal transverse plates M placed over the stirrups and resting against the cross ties above and below them.

A vertical chamber to receive oil for lubricating the rubbing surfaces is made in each rib extending from the top downward about 2 or 3 inches having three horizontal apertures communicating therewith near the bottom through which the oil flows to the outer surfaces of the ribs, said chamber containing a supply of cotton or other fibrous material for preventing the too rapid flow of the oil.

As the ribs wear they may be set toward the gate by means of the screw bolts and slots of the fender posts.

What we claim as our invention and which we desire to secure by Letters Patent is—

The combination of the jointed plates and stirrups for straining the saw at the front and back edge as described.

RANSOM COOK.  
SYLVESTER E. BURNHAM.

Witnesses:

WM. P. ELLIOT,  
EDW. MAHER.