

W. Lawyer,

Hoop Mach.

No. 96,448.

Patented Nov. 2. 1869.

Fig. 1.

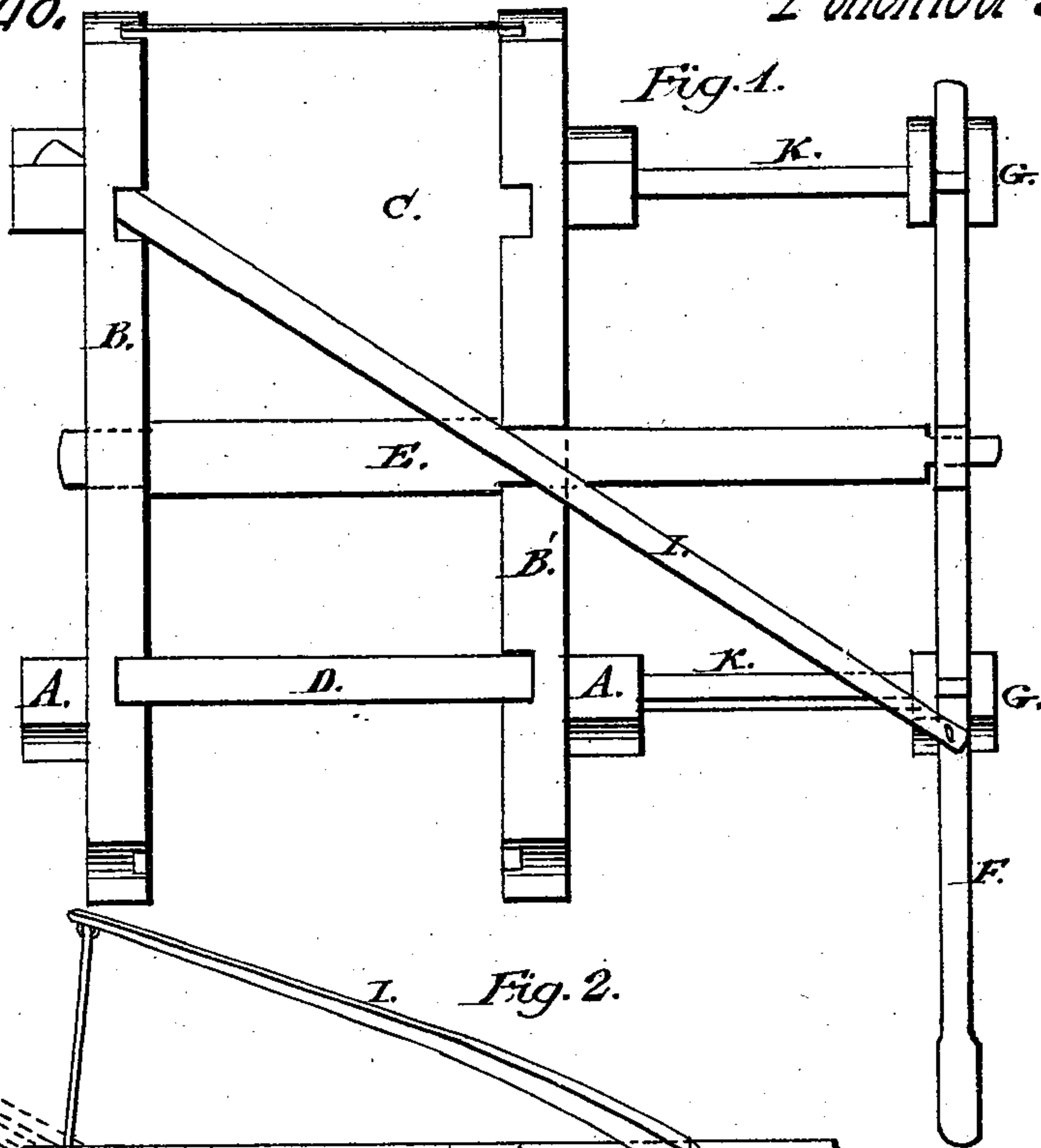
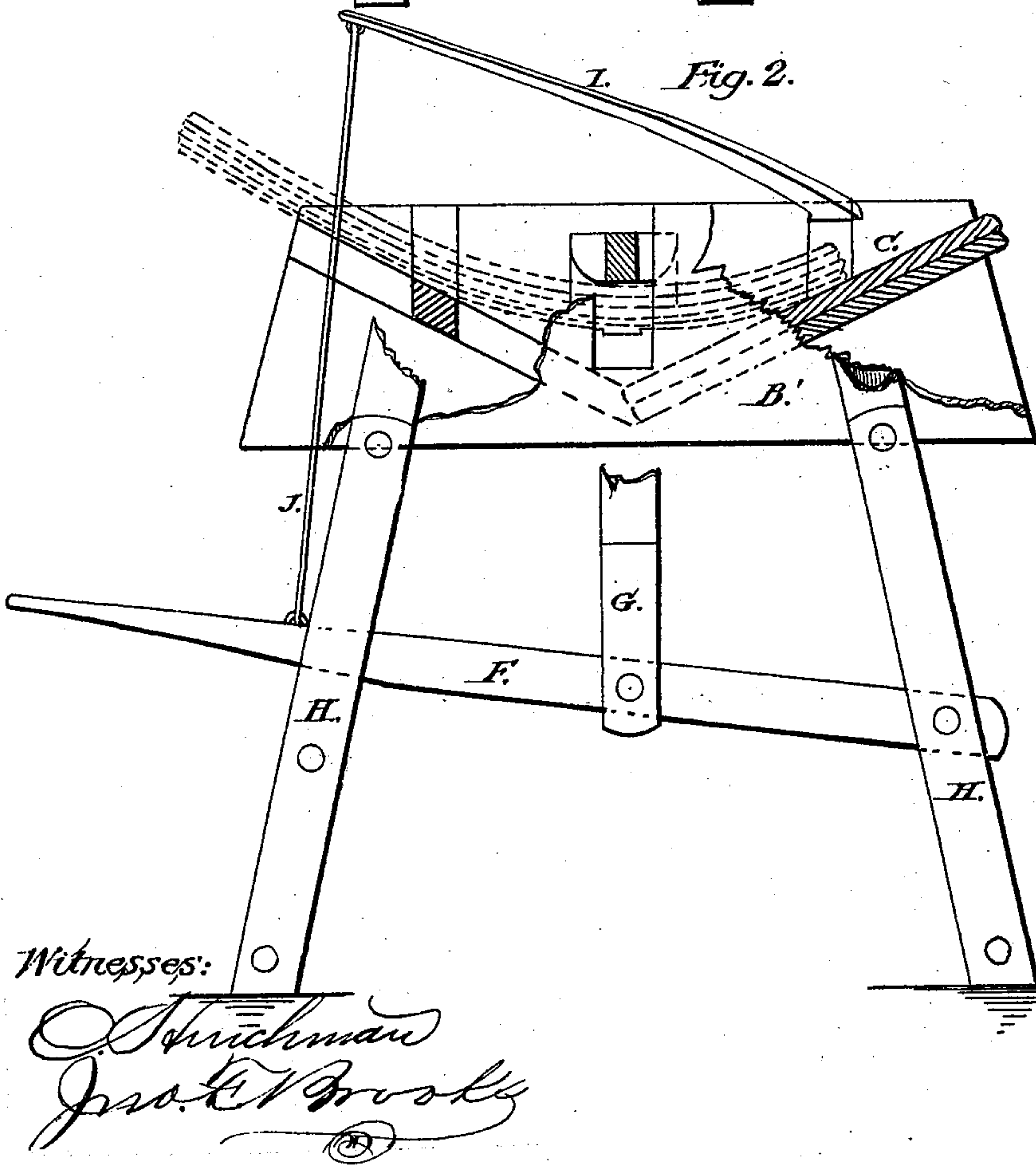


Fig. 2.



Witnesses:

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United States Patent Office.

WILLIAM LAWYER, OF MACOMB, NEW YORK.

Letters Patent No. 96,448, dated November 2, 1869.

IMPROVEMENT IN MACHINE FOR MAKING HOOPS.

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 LAWYER, of Macomb, in the county of St. Lawrence, and State of New York, have invented a new and useful Improvement in Hoop-Machines; 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.

This invention relates to a new and useful improvement in machines for facilitating the manufacture of hoops, having particular reference to what is called "racking," by those engaged in the business, which means splitting with the grain of the wood, by means of pressure, the prepared wood; and

The invention consists in constructing a machine for this purpose, as hereinafter more fully described.

In the accompanying drawings—

Figure 1 represents a top view.

Figure 2 is a side elevation of the machine, with parts broken away, in the drawing, for the purpose of showing the manner in which it is constructed.

Similar letters of reference indicate corresponding parts.

A represents the frame, which is made of wood, and of suitable size and height for the purpose.

B B' represent the sides of the machine, which are planks, of suitable width, secured to the inside of the parts of the frame.

C is an inclined bed, extending about one-half the length of the machine between sides B B', placed in grooves in the sides, and removable at will.

D is an adjustable bar, also confined in grooves in the sides, so that it may be moved back and forth.

E is the brake, or racking-lever, which has its fulcrum in the side B placed transversely across the frame, and works in a vertical slot in the side B'.

Its end extends out from the side, as seen in the drawing, and is connected with the driving-lever F by means of the connecting-bars G.

H H are guide-bars, which are placed in two pairs, so that they support and guide the driving-lever, as seen in the drawing.

I is a spring, which is attached to the side B, and extends over the machine, and is connected with the lever F by the cord J, and serves to raise the driving-lever F, as well as the racking-lever E, after the same have been forced down by the foot of the operator.

The timber for the hoop is split up into pieces of suitable size, sufficient to make, say from five to twenty hoops, more or less, according as the timber may work when split to the best advantage.

When properly prepared, one or more pieces are placed in the machine, over the bar D, with one end resting on the bed C.

When thus placed, the racking-lever E is forced down on to it by means of the lever F.

The end of the piece of timber is first checked by splitting in a short distance, for as many hoops as the piece is designed to make, when it is placed with its end under and near the racking-lever, and the power is applied. The strain produced by subjecting the timber to the pressure as it is fed along continues the checks commenced at the end, and in running the piece through the machine, it is separated or split with the grain of the wood into the number of hoops first started. The piece of timber thus being fed through the machine is seen in red color in the drawing.

By placing the bed and the bar D above the racking-lever, an upward action of that lever will produce the same effect.

The guide and supporting-bars H are connected with the frame A by means of the projecting arms K, and they are so arranged that the lever F may be changed to the other end of the machine, so that it may be worked with the left hand.

The bed C and the bar D may also be changed for the same purpose, as the machine is constructed with that object in view.

The bar D is made adjustable for the purpose of suiting the action of the racking-lever to the different kinds of timber, as tough or brash.

By the use of this machine, the operation of racking or manufacturing hoops is greatly facilitated.

Having thus described my invention,

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

The combination of a bed, C, adjustable bar D, a racking-lever, E, and an actuating-lever, F, all arranged and co-operating in the manner specified, to rack hoops.

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Witnesses:

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