

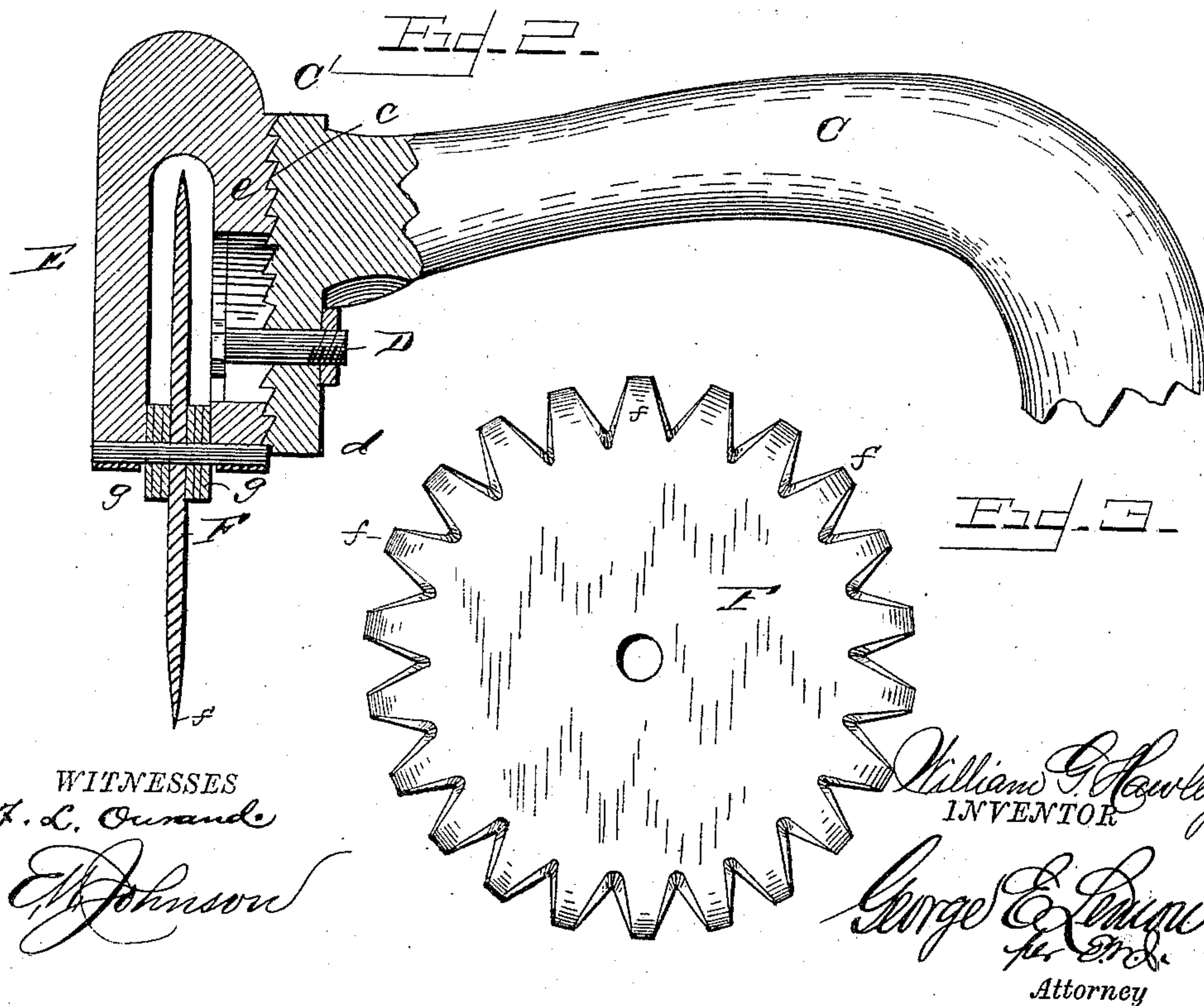
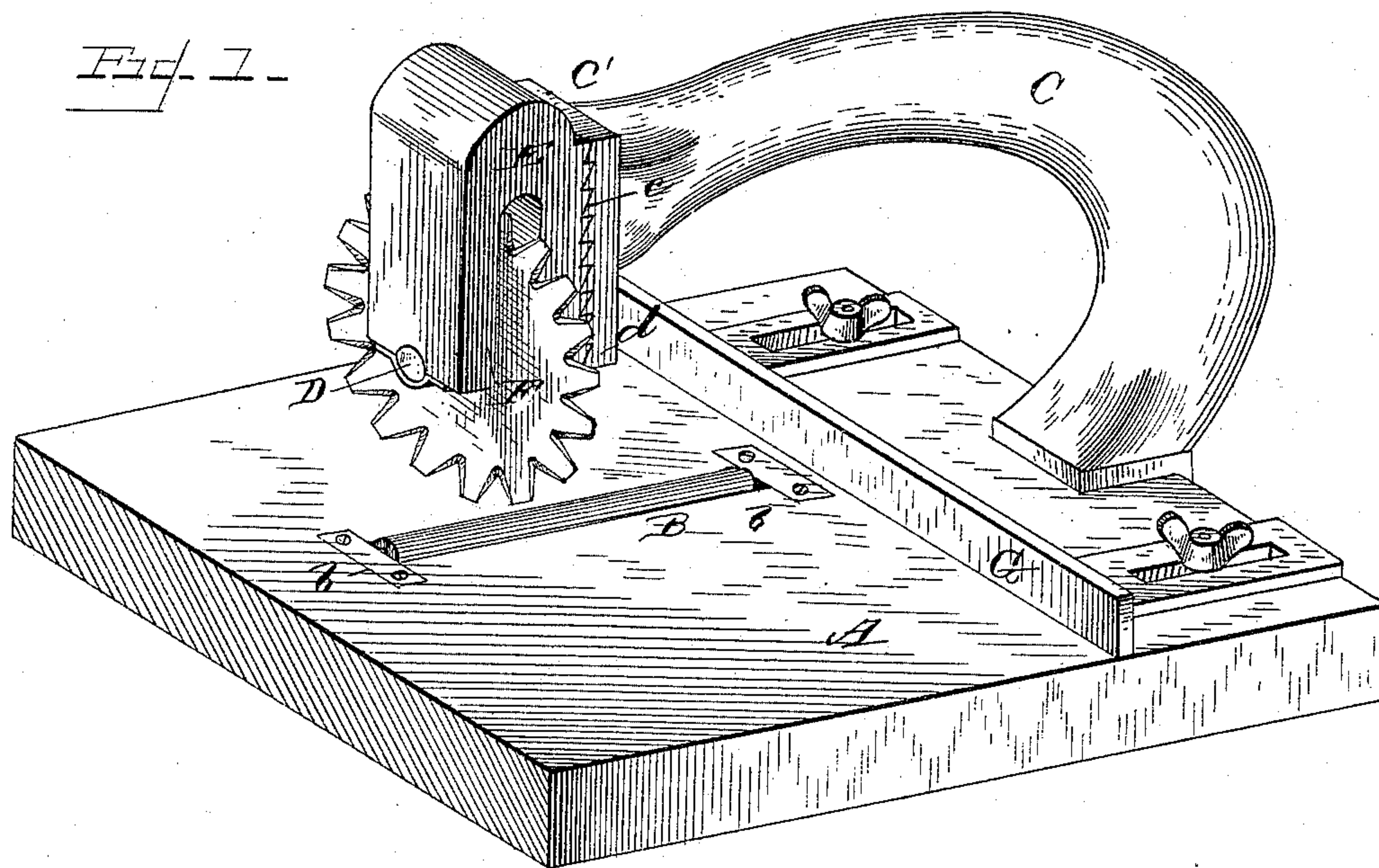
(No Model.)

W. G. HAWLEY.

SPLITTING SAW.

No. 331,195.

Patented Nov. 24, 1885.



WITNESSES
F. L. Ourand

Johnson

William G. Hawley
INVENTOR

George E. Evans
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM G. HAWLEY, OF HANFORD, CALIFORNIA, ASSIGNOR OF ONE HALF
TO FRANCIS A. BLAKELEY, OF SAME PLACE.

SPLITTING-SAW.

SPECIFICATION forming part of Letters Patent No. 331,195, dated November 24, 1885.

Application filed December 31, 1884. Serial No. 151,702. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. HAWLEY, a citizen of the United States of America, residing at Hanford, in the county of Tulare and State of California, have invented certain new and useful Improvements in Splitting-Saws; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in machines for splitting lumber, the same being designed for the purpose of cutting or ripping boards which are from one-eighth of an inch or under to one and a quarter inch in thickness, said machine being adapted to cut, rip, or split boards of such a thickness, either with or across the grain, without causing any waste; and my invention consists in the rotating knife, which is secured to the frame so that said knife will be held in a vertical position over a horizontal roller; also, in the construction and combination of the parts, as will be hereinafter fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, which illustrate my invention, Figure 1 is a perspective view. Fig. 2 is a sectional view, and Fig. 3 is a side view of the rotary knife.

A represents the base or platform, which is recessed for the reception of a roller, B, which projects slightly above the plane of said table or platform, and is secured within the recess by means of journals *b b*.

To the rear portion of the platform A is rigidly attached a projecting arm, C, the end *C'* of which is provided on its face with transverse serrations *c*, and a bolt, D, which passes through the depending portion *d'*, the head of which bolt engages with a vertical slot formed in the member *e* of the U-shaped portion E, between which the blade F is journaled. By the construction hereinbefore de-

scribed the blade F may be adjusted vertically, so as to enter the wood at any depth desired.

The platform A is provided with a gage, G, which is adjustable to and from the cutting-blade by means of set-screws.

The cutting-blade F is provided at its periphery with teeth *f*, which are sharpened on each of their faces, so as to be wedge-shaped in cross-section, and said blade is sharpened both at its periphery and upon the edges of the teeth.

The device hereinbefore described is adapted to be employed in connection with a machine which will feed the lumber under the blade; or the lumber may be fed and forced under the blade by hand. The blade is journaled in the lower ends of the U-shaped frame B, and the shaft of said blade is provided with washers *g*, which are located upon the shaft adjacent to the blade.

With the machine hereinbefore described lumber of moderate thickness may be separated either with or across the grain, and there will be no waste, as there is when the lumber is sawed. If desirable, the roller B may be provided with projecting spurs, so as to prevent the lumber moving laterally while passing under the blade.

It will be obvious that when the material is passed longitudinally beneath the blade the teeth of the latter will be caused to successively enter the same and effect a split to the point where the next tooth enters, thereby continuing the splitting action and parting the material throughout its length. When the material is fed so that the teeth of the blade act on the same in a transverse direction, a series of indentations or depressions will be made, sufficiently close together and of such depth as to enable the material to readily enter on the line of said indentations.

I claim—

1. In a device for splitting lumber as described, the base A, provided with a roller, B, in combination with an overhanging arm provided at its end with a circular blade, F, said blade being provided with teeth *f*, which are

wedge-shaped in cross-section, substantially as shown, and for the purpose set forth.

2. The circular blade F, mounted upon a journal attached to a vertically-adjustable section, the arm C, gage G, and roller B, attached
5 under the saw, the parts being combined and organized substantially as shown, whereby lumber may be forced beneath the blade to cause the latter to rotate, and result in its

periphery entering said lumber and splitting it the same, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM G. HAWLEY.

Witnesses:

J. T. BAKER,

R. W. MUSGRAVE.