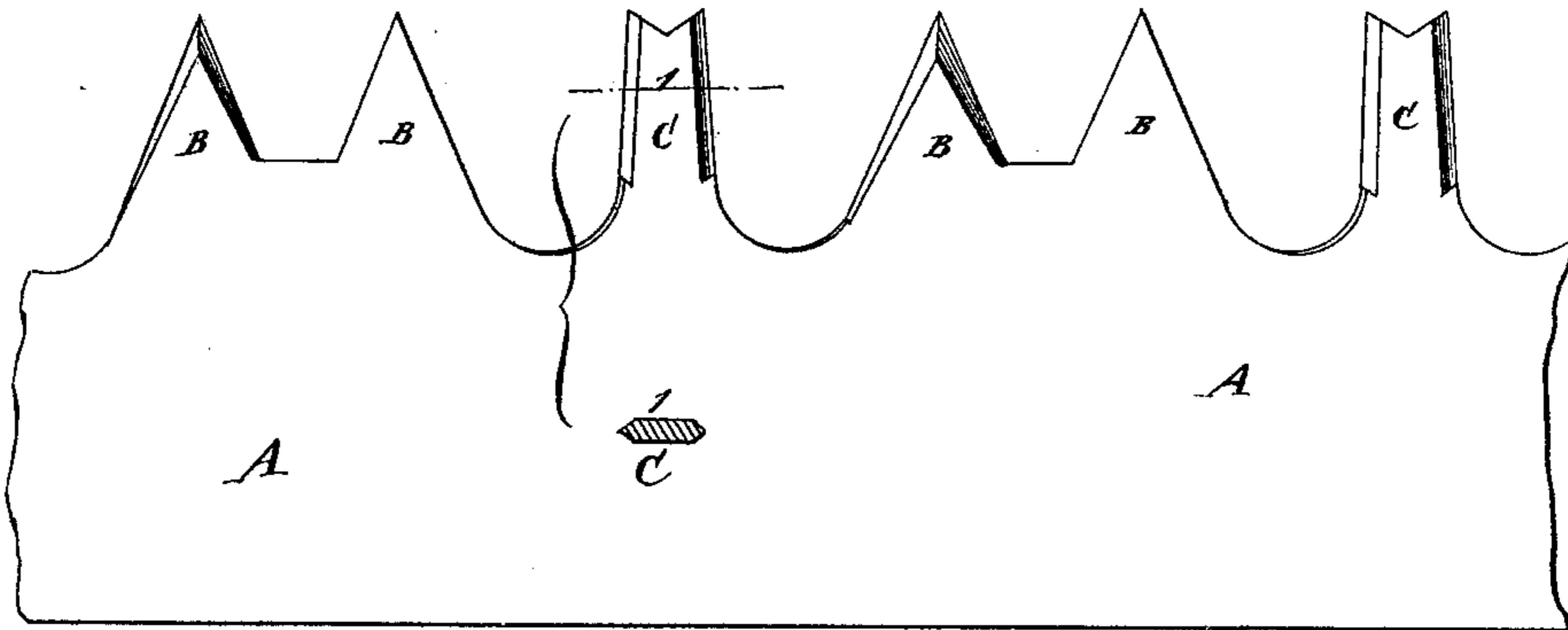


A. BOYNTON.  
SAW-TEETH.

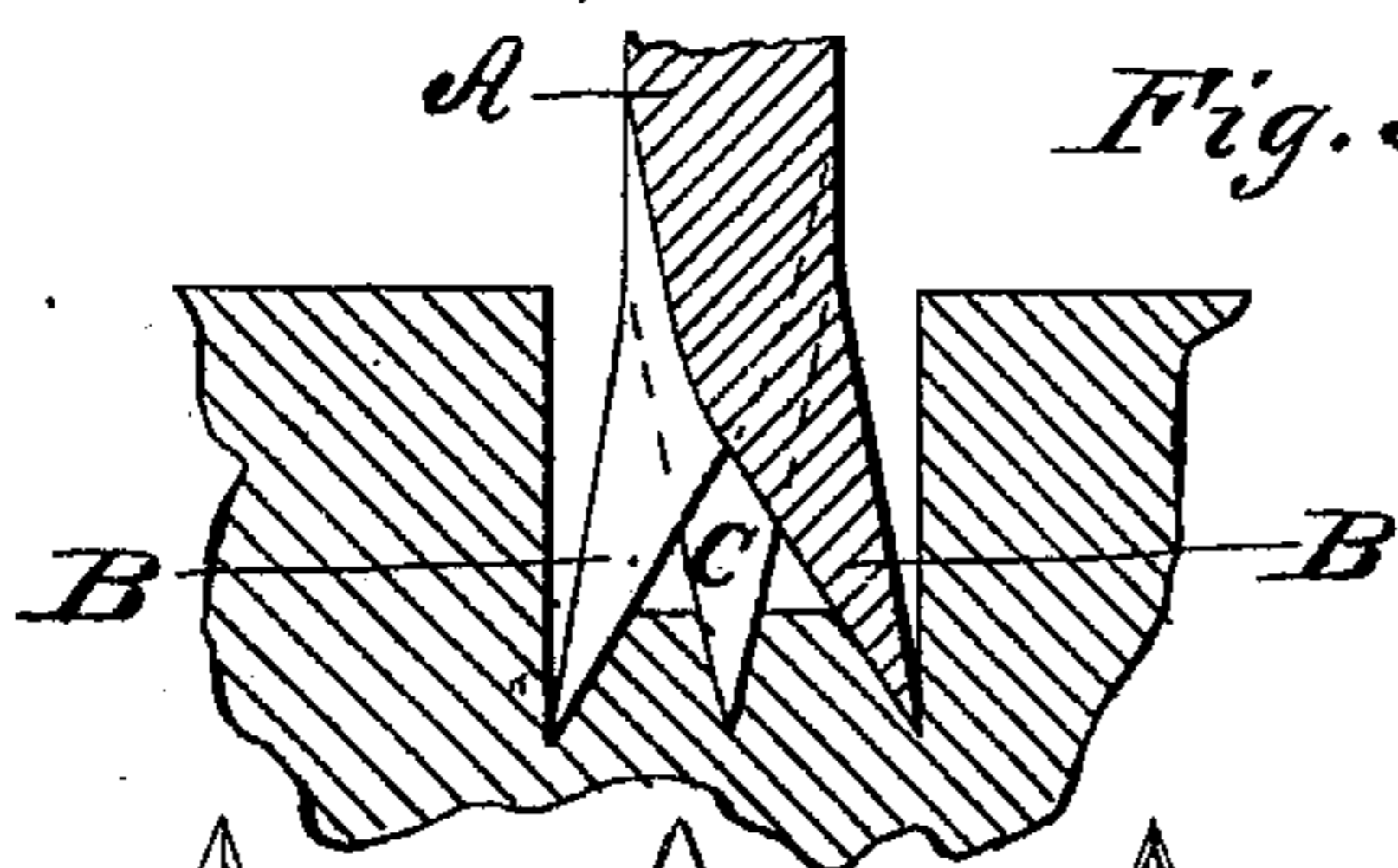
No. 180,986.

Patented Aug. 15, 1876.

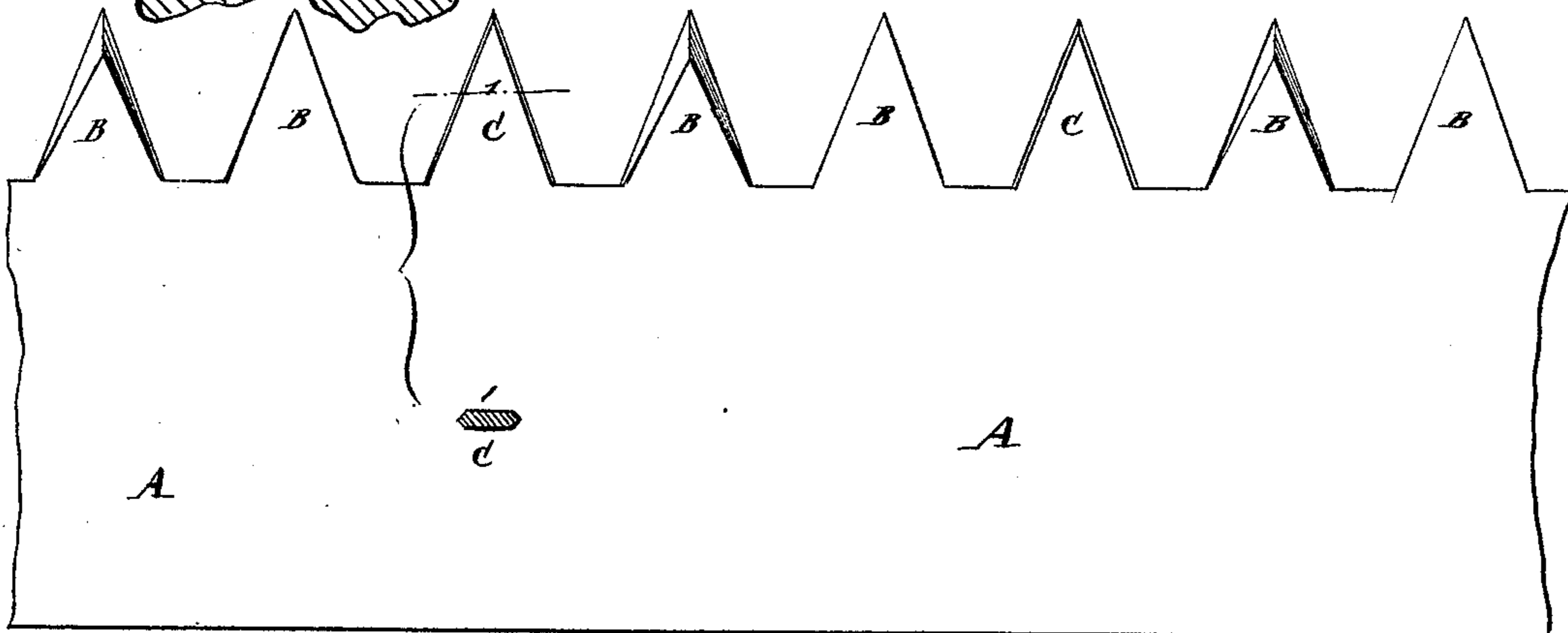
*Fig. 1*



*Fig. 3.*



*Fig. 2*



WITNESSES:

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*Alfred Boynton*  
BY *Henry T. C.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

ALFRED BOYNTON, OF BROOKLYN, NEW YORK, ASSIGNOR TO PEACE & HOGAN, OF SAME PLACE; AND SAID PEACE & HOGAN ASSIGNORS TO E. M. BOYNTON.

## IMPROVEMENT IN SAW-TEETH.

Specification forming part of Letters Patent No. **180,986**, dated August 15, 1876; application filed March 15, 1876.

*To all whom it may concern:*

Be it known that I, ALFRED BOYNTON, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Saw-Teeth, of which the following is a specification:

My invention consists in clearer-teeth for saws, having both edges beveled on both sides, so as to bring the cutting-edge at the center of the vertical line of the tooth, and having said clearer-teeth left straight without any set, so that their points shall strike the wood midway between the line of the points of the cutting-teeth, as hereinafter more clearly set forth.

Figure 1 is a side elevation of a saw having my improvement applied. Fig. 2 is a similar view, representing a different style or form of cutting-teeth with my improved clearer-teeth applied. Fig. 3 is a transverse vertical section, showing the relative position of the clearer and the cutting-teeth, and illustrating their action on the wood in the act of sawing.

In the various styles of crosscut-saws made of late it has become customary to use what are known as "clearer-teeth," their function being to loosen and remove the wood which is cut by the points of the cutting-teeth, so as to get it out of the way of the cutting-teeth following after.

In my patent of November 27, 1866, I show such clearer-teeth; but in that, and in the patent granted E. M. Boynton January 14, 1868, the clearer-teeth are made in such a form as to operate on the principle of a chisel or plane, while in my present invention I construct the clearer-teeth on a different plan.

Referring to the drawings, B B represent the cutting-teeth, made in the usual manner,

while C indicates the improved clearer-teeth. These clearer-teeth have their edges beveled on both sides, so as to bring the line of junction of the two inclines on the opposite sides at the center of the edge, as represented in the cross-sections shown in Figs. 1 and 2, and both edges of the clearer-teeth are thus beveled. These clearer-teeth C I make of the same length as the cutting-teeth, but leave them straight—that is, without any set—whereby their extreme point is brought in contact with the wood at a point midway between the points of the cutting-teeth B, as shown in Fig. 3, by which means they loosen and remove the chips or fiber, which has been already cut at the sides of the kerf by the cutting-teeth.

I am aware that a saw has been made with clearer-teeth of the same length as the cutting-teeth, and without any set; but such teeth were beveled on one side only, the same as cutting-teeth are.

By beveling my clearer-teeth on both sides they are caused to run in a perfectly true line through the center of the kerf, without any tendency to spring to either one side or the other, and thus they are made to operate on cut fiber with the utmost certainty and efficiency.

Having thus described my invention, what I claim is—

The clearer-teeth C, beveled on both sides, on each of their clearing-edges, substantially as shown and described.

ALFRED BOYNTON.

Witnesses:

JAMES T. GRAHAM,  
T. B. MOSHER.