

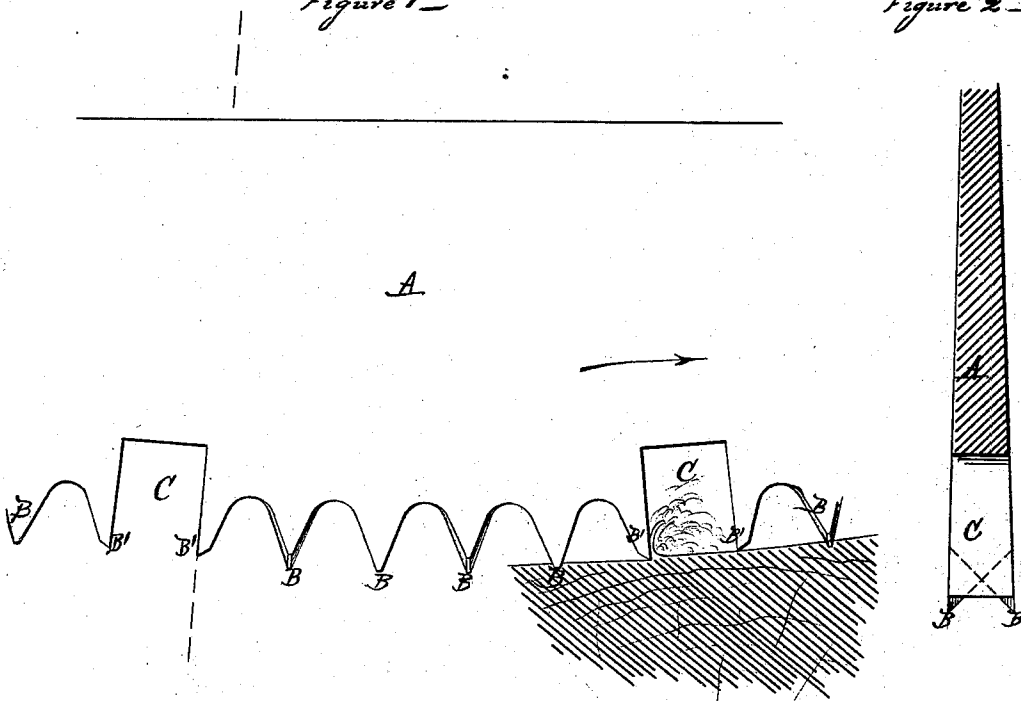
E. ANDREWS.  
SAW.

No. 111,164.

Patented Jan. 24, 1871.

Figure 1—

Figure 2—



ATTEST.

James Thierry  
Atty. S. Spang

INVENTOR:

E. Andrews  
Per Atty  
Chas. S. Spang

# United States Patent Office.

EMANUEL ANDREWS, OF WILLIAMSPORT, PENNSYLVANIA.

Letters Patent No. 111,164, dated January 24, 1871.

## IMPROVEMENT IN SAWS.

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

### *To whom it may concern:*

Be it known that I, EMANUEL ANDREWS, of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented a new and useful Improvement in Cross-cut Saws; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification.

The nature of this invention relates to an improvement in the construction of the teeth in cross-cut saws, and consists in a cross-cut saw provided with scoring-teeth, clearing-teeth, and recesses, wherein the scoring-teeth have beveled cutting-edges, the clearing-teeth are in the same vertical plane with the saw-blade, are of less height than the scoring-teeth, having horizontally-beveled faces with cutting-edges toward each other, and are separated by the recesses above named, which recesses are of greater depth than the height of the teeth, and occupy a distance longitudinally equal to the distance between the cutting-points of two adjacent scoring-teeth, as hereinafter more fully set forth.

In the drawing—

A represents a cross-cut saw, provided with the scoring-teeth B, of the usual form.

C are vertical recesses, formed by cutting away one-half of two contiguous teeth, which, by leaving them without set and filing them square across their faces, become the clearing-teeth B', whose cutting-edges

face each other. The clearing-teeth, for obvious reasons, are made shorter than the scoring-teeth B.

The recesses are carried as far up into the plate as may be necessary to contain the chips or shavings taken from the core by the clearing-teeth.

In operating a saw constructed as above described the back of each clearing-tooth B' rides on the core formed in the bottom of the kerf by the scoring-teeth, and serves as a gauge to prevent the front or cutting-edge of the following clearing-tooth from digging into the bottom of the kerf, simply allowing it to take up the core, which enters and is carried along in the recess until it passes out of the log, when the chips fall out of their own gravity.

It will readily be seen that my improvement can easily be applied to ordinary cross-cut saws now in use.

Figure 1 is a plan view of my saw; and

Figure 2, a vertical transverse section.

What I claim as my invention, and desire to secure by Letters Patent, is—

The cross-cut saw A, provided with scoring-teeth B, clearing-teeth B', and recesses C, when the several parts are constructed and arranged as described and shown, and as and for the purposes set forth.

EMANUEL ANDREWS.

Witnesses:

H. S. SPRAGUE,  
H. F. EBERTS.