

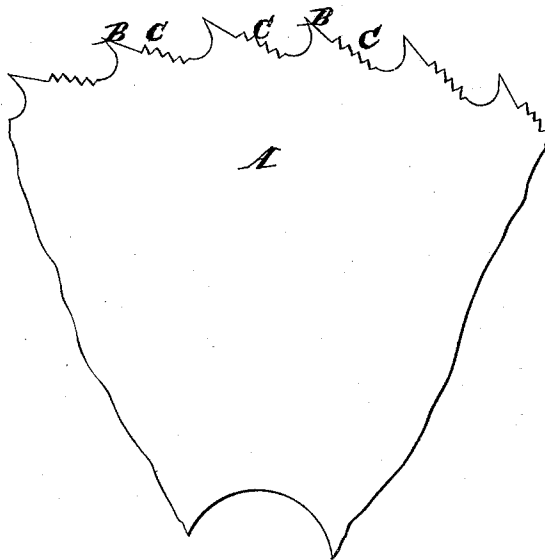
(No Model.)

J. OLDHAM.  
Saws.

No. 233,008.

Patented Oct. 5, 1880.

*Fig. 1.*



*Fig. 2.*



WITNESSES

*John A. Egan.*  
*W. J. Hutchinson*

INVENTOR

*Joshua Oldham*  
*Per J. W. Minter*

ATTORNEY

# UNITED STATES PATENT OFFICE.

JOSHUA OLDHAM, OF NEW YORK, N. Y.

## SAW.

SPECIFICATION forming part of Letters Patent No. 233,008, dated October 5, 1880.

Application filed May 8, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JOSHUA OLDHAM, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Saw-Teeth; and I do hereby declare that the following is a full, clear, and exact description thereof sufficient to 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 the letters of reference marked thereon, and in which—

Figure 1 is a side view of my improved teeth as applied to a circular saw. Fig. 2 is a plan view of Fig. 1.

This invention contemplates improvements in saw-teeth, having for its object to prevent the heating or expansion of the blade by friction at the base of the tooth and below its point, to overcome the "buckling" action arising from friction, to which the teeth were heretofore exposed at these points; and it consists in the employment of supplemental inner teeth arranged in series between or upon the sloping surfaces or backs of the main teeth, starting at the base and stopping below the points of the main teeth, with the same set as, or less set than, the main teeth, substantially as hereinafter more fully set forth.

Referring to the accompanying drawings, A indicates the blade of a circular saw, with the sloping surfaces or backs of its teeth B provided each with a series of inner supplemental teeth, C C, starting or commencing at the base and

terminating below the point of a tooth, B, as clearly seen in Fig. 1. This arrangement of the inner supplemental teeth, C, by reason of their covering the body of the tooth or teeth, and being provided with the same set as, or less set than, the main teeth B, effects the cutting of the kerf from the base up to a point meeting the width of cut made by the set of the fleam-teeth, thus not only clearing the kerf, but enlarging the kerf from base to point of the tooth, to prevent frictional contact between the body or sides of the tooth and the material or wood being cut, to avoid the heating or expanding of the metal, in which event the blade or tooth would buckle and not permit of the fast rate of feeding of the lumber to the saw as accomplished with my saw.

Having thus fully described my invention, I claim and desire to secure by Letters Patent—

A saw the backs or sloping surfaces of the teeth of which are provided each with a series of inner supplemental teeth, commencing at the base and stopping below the point of the tooth, with the same set as, or less set than, the main teeth, substantially as and for the purpose set forth.

In testimony whereof I hereunto annex my signature in presence of two subscribing witnesses.

JOSHUA OLDHAM.

Witnesses:

THOS. CROCKER,  
THOMAS GEORGE.