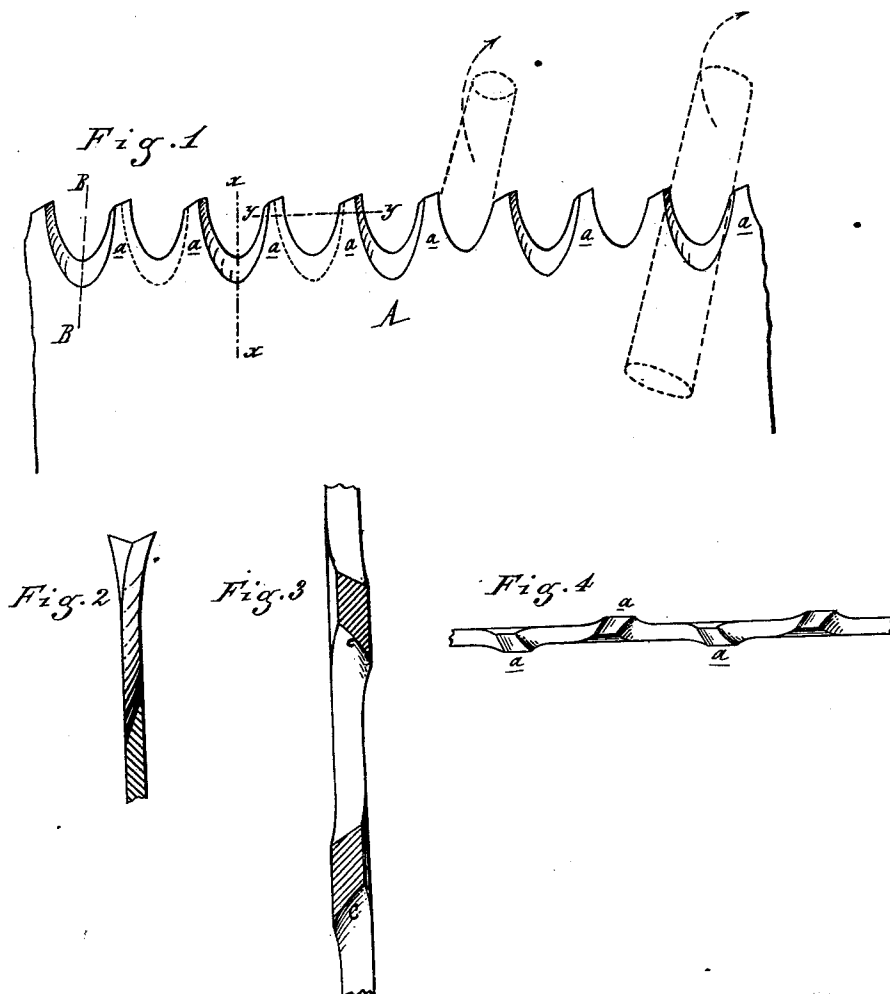


(No Model.)

C. SUISSE.  
Saw.

No. 229,772.

Patented July 6, 1880.



Attest:  
v. Barthel  
Charles H. Hunt

Inventor:  
Charles Suisse  
By Atty  
J. D. Sprague

# UNITED STATES PATENT OFFICE.

CHARLOUIS SUISSE, OF ST. CLAIR, MICHIGAN.

## SAW.

SPECIFICATION forming part of Letters Patent No. 229,772, dated July 6, 1880.

Application filed March 12, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLOUIS SUISSE, of St. Clair, St. Clair county, Michigan, have invented an Improvement in Saws, of which the following is a specification.

The nature of this invention relates to certain new and useful improvements in saw-teeth, so as to produce a tooth which shall have an extended cutting-edge; and the invention consists in the peculiar construction and formation of the teeth, as more fully hereinafter set forth.

In the drawings, Figure 1 is a side elevation of a section of a saw, showing my improved form of teeth. Fig. 2 is a cross section on line *xx*. Fig. 3 is a longitudinal section on the line *yy*. Fig. 4 is a plan view of the cutting or toothed edge of the saw.

In the accompanying drawings, which form a part of this specification, A represents a saw-blade provided with the teeth *a*, which are formed in the following manner: I take a round file, (shown in dotted lines in Fig. 1,) and when making the cutting or forward stroke I partially rotate the same, which, by holding the file at an angle to the teeth, cuts a parabolic indentation, whose axis B B is slightly inclined forward, as shown, the rotation giving the cutting-edge a concave section, as shown at *c* in Fig. 3. By thus filing between every other or alternate pair of teeth upon opposite sides of the saw a cutting-edge is formed upon each tooth upon alternate sides of the saw-blade, which cutting-edges are upon corresponding edges of the teeth—that is, toward the front or toe of the saw. After the teeth have been filed, as above described, I take a suitable file and file down the points of the teeth,

slightly inclining from the front or cutting-edge back, which leaves them in nearly a diamond shape, as shown. The teeth now being properly filed, they are set, as in the ordinary manner, and the saw is ready for use.

A saw formed in this way has, instead of the usual straight-faced teeth, caused by the ordinary mode of making saws, a series of teeth, each tooth having a planing edge and a concave face, and as the indentations are cut on alternate sides between each two teeth, the planing-edges are made alternately on opposite sides, and by this means a saw is produced that is very rapid in its actions and smooth in its cut.

I have described above the method I prefer to employ in forming the saw-teeth on the blade by a round file manipulated as set forth, though saw-teeth of the same construction may be formed on the blade by other means, and I do not desire to confine myself to any particular means of forming such teeth, my claim being designed to cover a saw-blade having teeth constructed as hereinbefore described.

What I claim as my invention is—

The saw-plate A, having teeth *a*, formed by a series of parabolic indentations cut alternately from opposite sides of the plate, the teeth being provided with concave faces *c* and planing-edges on opposite sides alternately, substantially as described, and for the purpose specified.

CHARLOUIS SUISSE.

Witnesses:

H. S. SPRAGUE,  
A. BARTHEL.