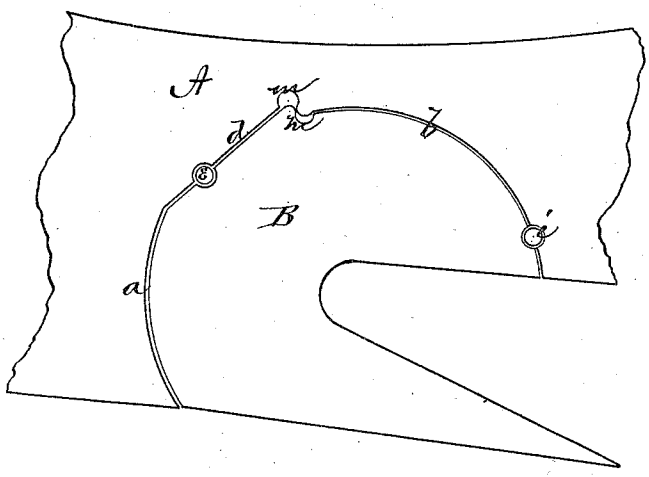
N. JOHNSON.

Insertable Saw-Teeth.

No. 134,290. Patented Dec. 24, 1872.



Witnesses:
Frank L. Durand
C. L. Ewert.

Inventor.
Nelson Johnson.
per Alexander Mason
Attorneys.

UNITED STATES PATENT OFFICE.

NELSON JOHNSON, OF JASPER, NEW YORK.

IMPROVEMENT IN INSERTABLE SAW-TEETH.

Specification forming part of Letters Patent No. **134,290**, dated December 24, 1872.

To all whom it may concern:

Be it known that I, NELSON JOHNSON, of Jasper, in the county of Steuben and in the State of New York, have invented certain new and useful Improvements in Insertable Saw-Teeth; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a circular-saw tooth, and in the mode of fastening the same to the saw-plate, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which shows a front view of a part of the saw-plate with one tooth attached in the same.

A represents the plate of a circular saw, and B one of the teeth inserted in the same. This tooth is formed with two or more circles, *a* and *b*, having the same center, the back circle *a* having a larger radius than the circle *b*, and the edges grooved in the usual manner, the edges of the recess in the plate for receiving the teeth being V-shaped, to fit in said grooves. By making the circle at the back larger, as above described, the wearing-surface is increased to a considerable extent. Between the two circles *a* and *b* is a straight part, *d*, and in the same is made a jog or notch for the reception of the rivet *e*, which is contained, for one-half its thickness, in the plate, and the other half in the tooth, to prevent the tooth from swinging in the circle. The corners at the joint of the straight part *d* and the circle *b* are rounded or enlarged, as shown, at *m m*, thereby enabling the workman to clip off the ends without injuring or breaking his tools, and also preventing any strain from breaking the tooth at these points. The inner point of the tooth is fastened by means of a rivet, *i*, as shown. To remove the tooth, the end may be readily cut off with a cold-chisel.

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

The combination of the plate A and tooth B with circles *a b*, having the same center but of unequal radiuses, the straight part *d*, rivets *e i*, and rounded corners *m m*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of May, 1872.

NELSON JOHNSON.

Witnesses:

A. MURPHY,

C. G. HUTCHINSON.