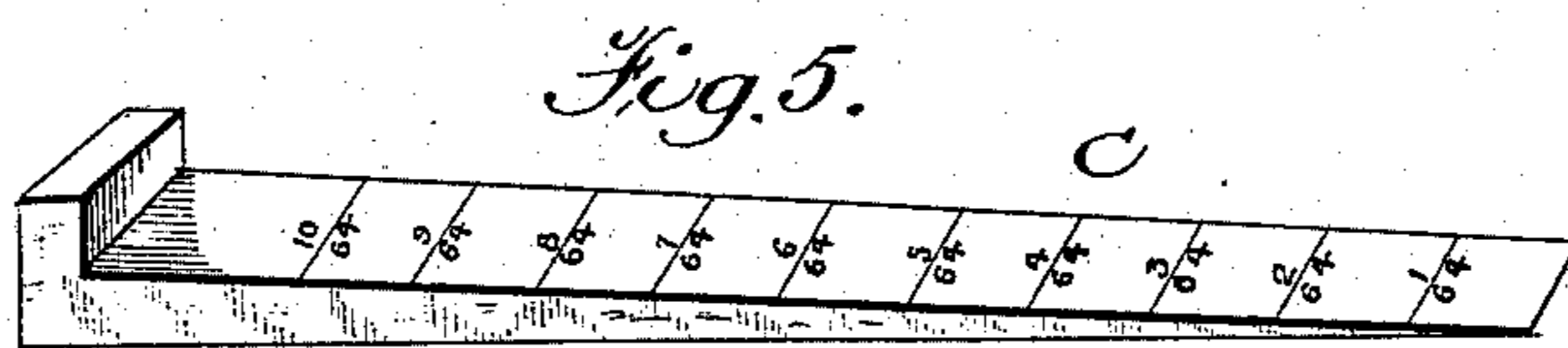
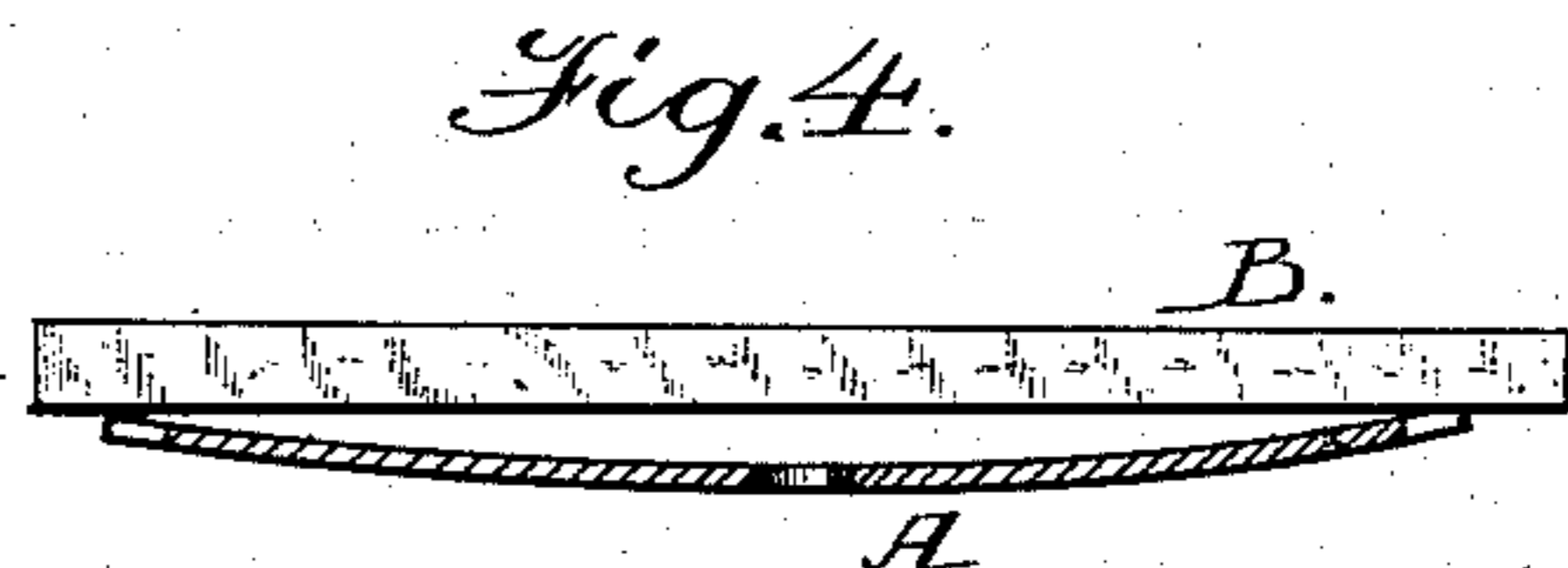
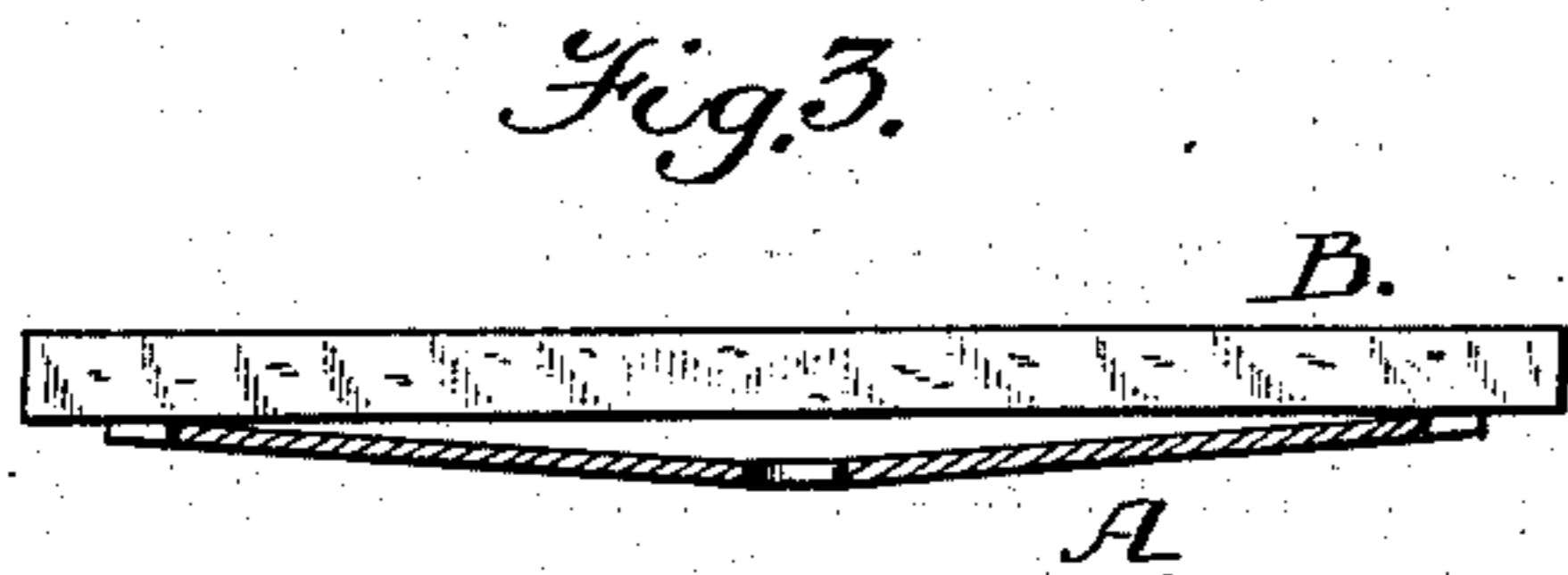
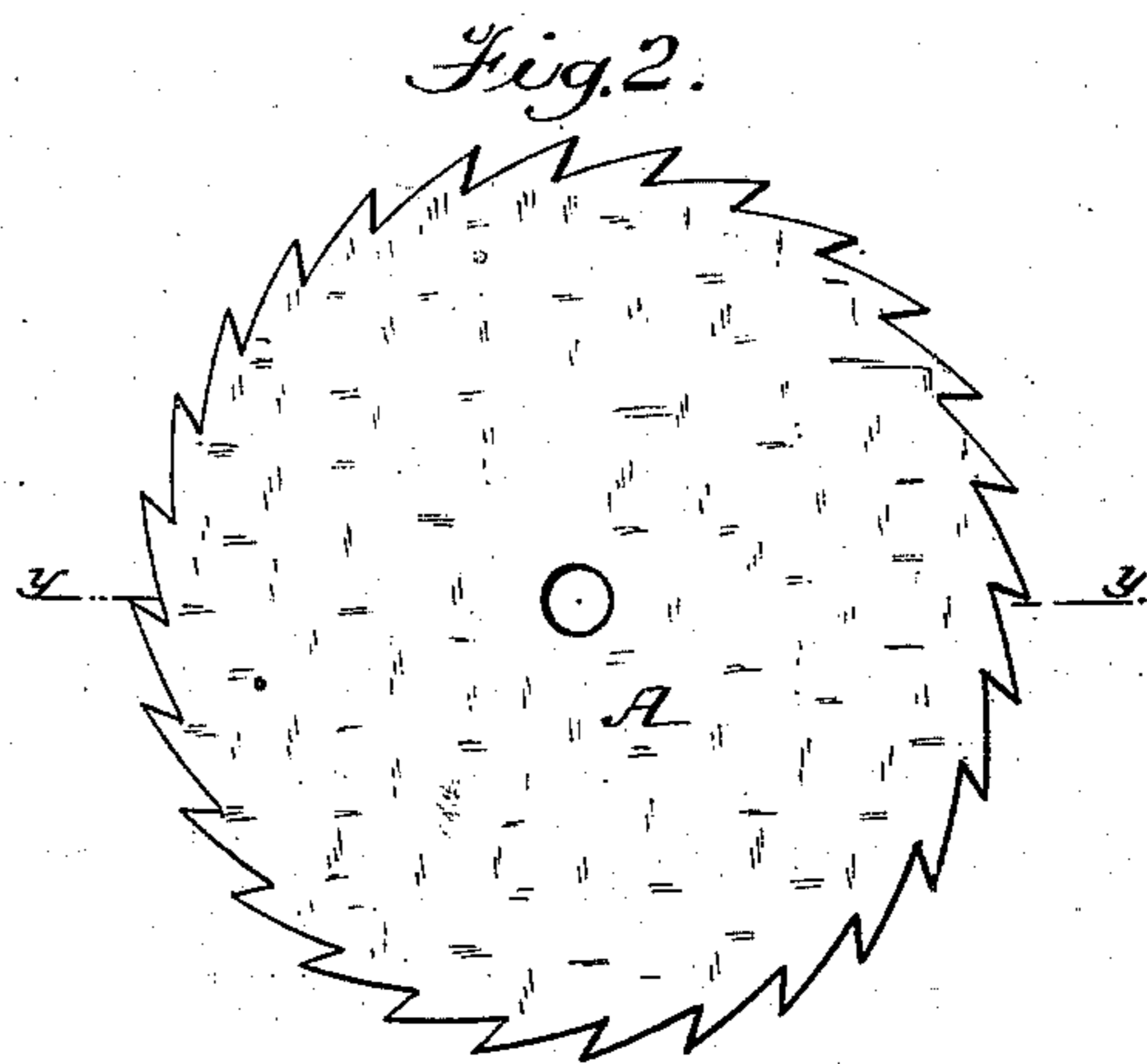
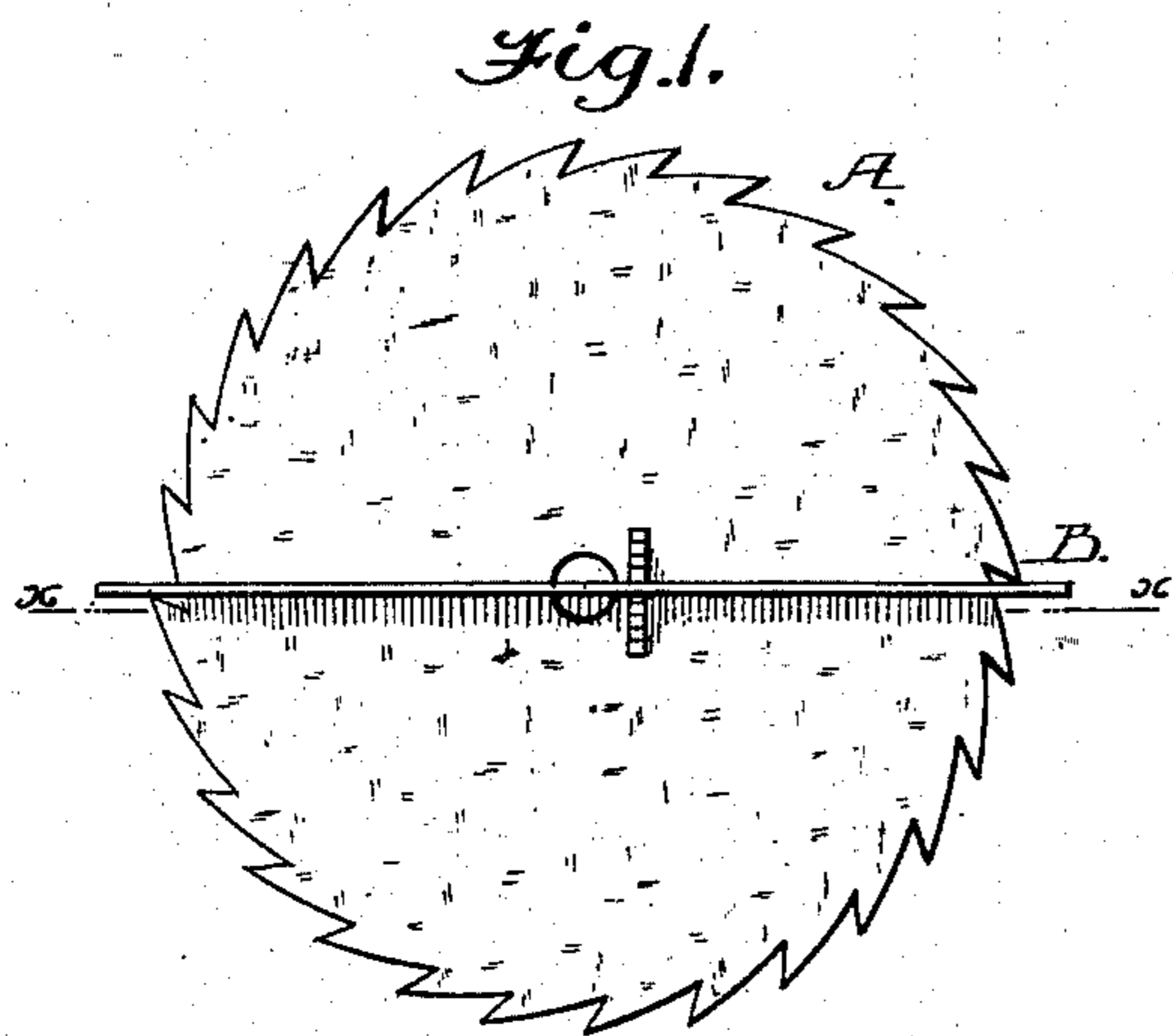


(No Model.)
G. F. & D. SIMONDS, & A. A. MARSHALL.
Method of Adjustment of the Tension of Circular Saws.
No. 239,863. Patented April 5, 1881.



Witnesses:

S. Walter Fowler,
Jno. L. Condron.

Inventor;

Geo. F. Simonds
Daul. Simonds
Alfred A. Marshall
Per Atty. A. H. Evans & Co.

UNITED STATES PATENT OFFICE.

GEORGE F. SIMONDS, DANIEL SIMONDS, AND ALFRED A. MARSHALL, OF
FITCHBURG, MASSACHUSETTS.

METHOD OF ADJUSTMENT OF THE TENSION OF CIRCULAR SAWS.

SPECIFICATION forming part of Letters Patent No. 239,863, dated April 5, 1881.

Application filed January 19, 1881. (No model.)

To all whom it may concern:

Be it known that we, GEORGE F. SIMONDS, DANIEL SIMONDS, and ALFRED A. MARSHALL, of Fitchburg, county of Worcester, and State of Massachusetts, have invented a new and useful Method of Determining the Adjustment of the Tension of Circular Saws, of which the following is a clear, full, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 shows a saw with our method for determining its adjustment applied. Fig. 2 shows the finished saw. Fig. 3 shows a cross-section through xx of Fig. 1. Fig. 4 shows a cross-section of a saw slightly modified in its adjustment. Fig. 5 shows the wedge-shaped gage.

Our invention has for its object to determine, by rule, the adjustment of the tension of circular saws. This has heretofore been left to chance, or was determined in each individual case by experiments and testing of the saw; and our invention consists in the application of a gage, as hereinafter explained.

To enable others skilled in the art to make and use our invention we will proceed to describe the exact manner in which we have carried it out.

In the drawings, A represents a saw which has been tempered and is ready for adjustment as to tension.

B is a straight-edge applied across the face

of the saw. When the latter is bent in a line at right angles to the straight-edge the lower portion of the saw will drop away, as shown in Figs. 3 and 4.

C is a graduated wedge-shaped gage, which is to be introduced between the straight-edge and the saw, as shown in Fig. 1. By means of this graduated scale thus introduced between the straight-edge and the saw when the latter is bent, we are enabled to determine with positive accuracy the tension of the metal, and thereby adjust the same to suit the size of the saw and the speed at which it is to be run.

It is evident a gage of different construction from the wedge may be attached to the straight-edge and varied for any given or required drop in the saw, or there may be an edge made to conform to the required drop in the saw, without departing from the spirit of our invention.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The method herein described for determining and adjusting the tension of saws, the same consisting in passing a graduated gage between a straight-edge and the bent saw, substantially as herein described.

GEO. F. SIMONDS.

DANIEL SIMONDS.

ALFRED A. MARSHALL.

Witnesses:

JNO. L. CONDRON,
R. K. EVANS.