

(No Model.)

E. SENN.

Punch for Gumming Circular Saws.

No. 238,060.

Patented Feb. 22, 1881.

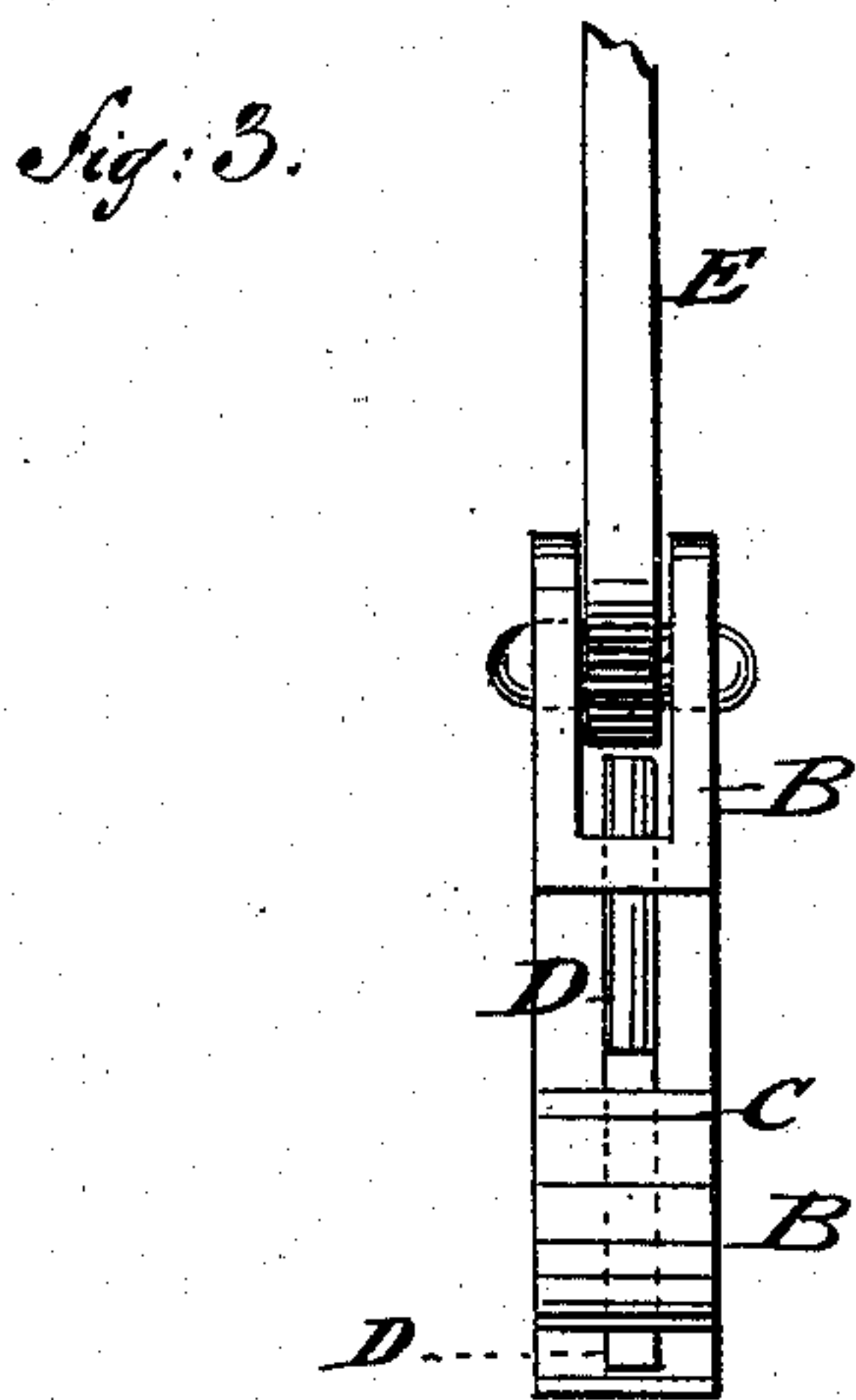
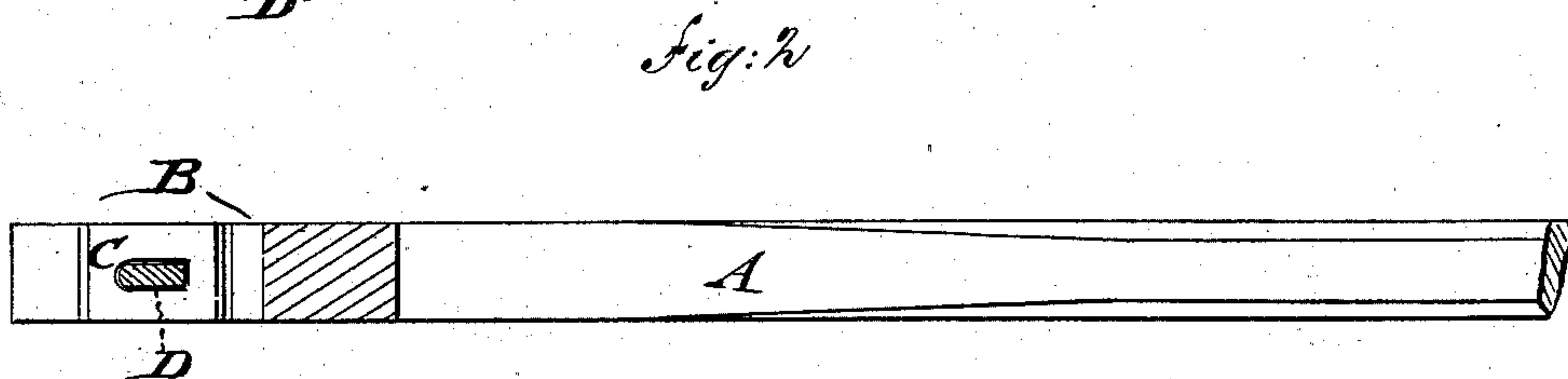
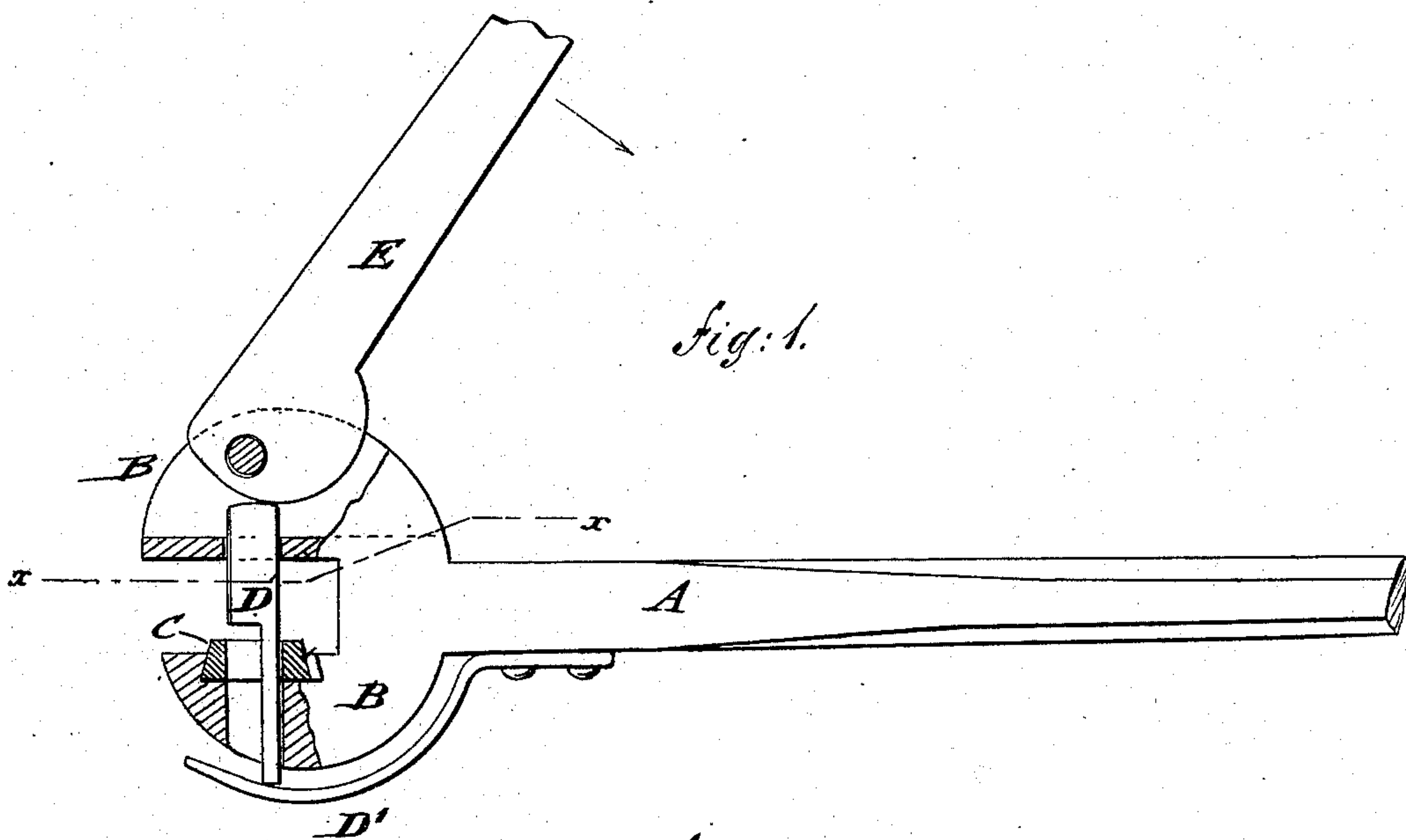
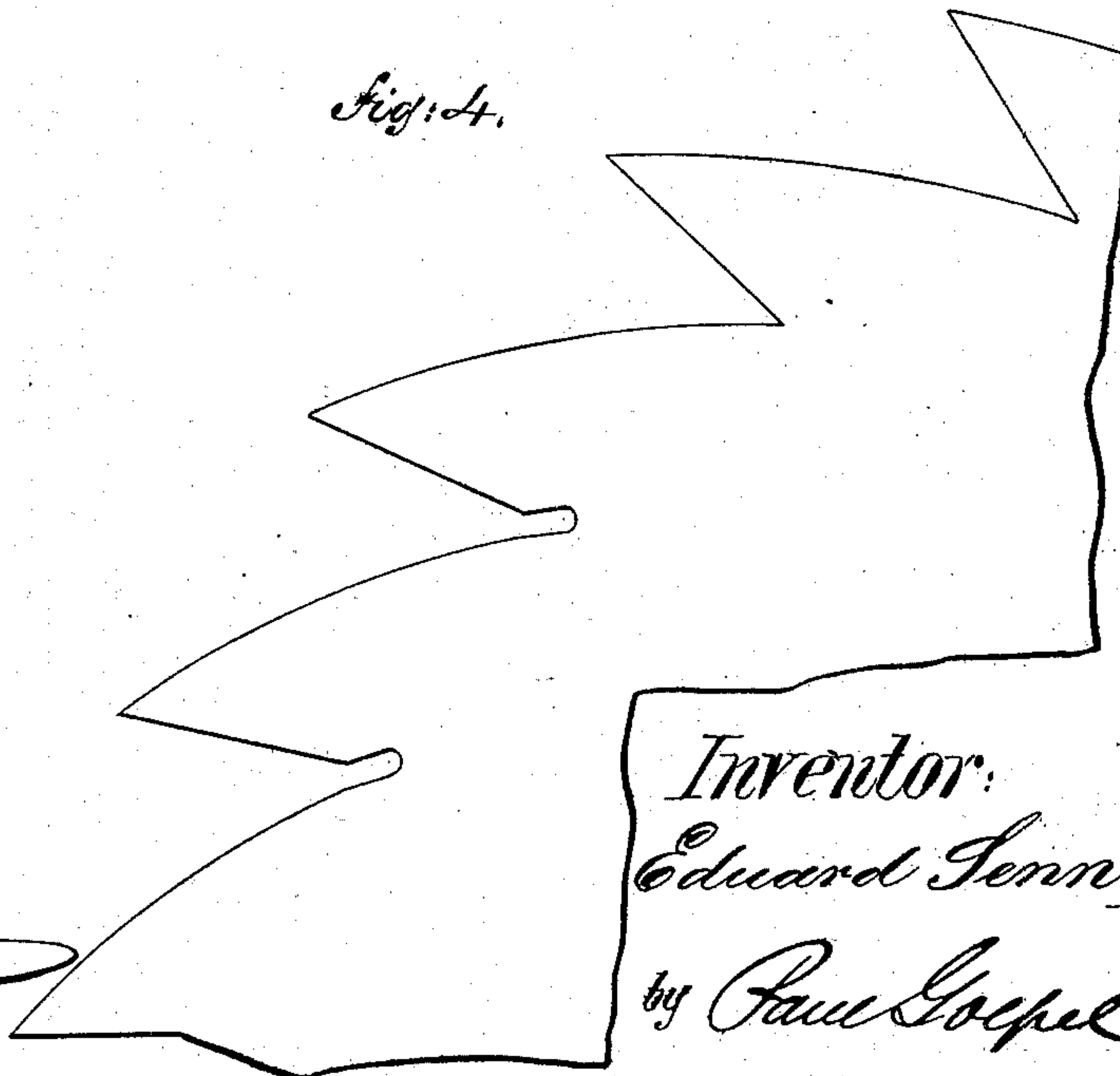


Fig. 4.



Witnesses. D'
Carl Karp
Otto Risch

Inventor:
Edward Senn
by Paul Goepel
Attorney.

UNITED STATES PATENT OFFICE.

EDUARD SENN, OF NEW YORK, N. Y.

PUNCH FOR GUMMING CIRCULAR SAWS.

SPECIFICATION forming part of Letters Patent No. 238,060, dated February 22, 1881.

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

To all whom it may concern:

Be it known that I, EDUARD SENN, of the city, county, and State of New York, have invented certain new and useful Improvements in Punches for Gumming Circular Saws, of which the following is a specification.

In the accompanying drawings, Figure 1 represents a sectional side elevation; Fig. 2, a horizontal section on line *xx*, Fig. 1; Fig. 3, a front view of my improved punch for gumming circular saws, and Fig. 4 shows a portion of a circular saw being partly gummed by my improved punch.

Similar letters of reference indicate corresponding parts.

This invention relates to an improved hand press or punch for gumming circular saws with great facility at a saving of time and labor; and the invention consists of a vertically-guided and spring-acted punch, which is extended by its lower or narrower part through the die set into the lower part of a recessed handle, while the upper or larger part of the punch is guided in the upper part of the handle and acted upon by a cam-lever pivoted thereto.

In the drawings, A represents the main lever or handle of my improved punch for gumming circular saws, which handle is provided with an enlarged and recessed end portion, B, into the lower part of which the die C is rigidly secured by a wedge-key or otherwise.

The punch D is made wider at its upper part than at its lower part, the latter narrower part being passed through the die and through a hole of the recessed end portion B in line with the opening of the die, and acted upon at

its lower end by a strong band-spring, D'. The upper larger part of the punch D is guided in a slot of the upper part of the enlarged portion B, and acted upon by a cam-lever, E, which is pivoted to the recessed upper part of the end portion, B, so that by throwing the cam-lever down the punch D is lowered into the die, and thereby a piece of a size corresponding to the upper projecting portion of the punch is cut out from the saw-tooth, as shown in Fig. 4. When the cam-lever is raised the punch is lifted by its spring so as to clear the die, ready for the next gumming.

The front edge of the punch and die is of semicircular shape, so as to produce a corresponding semicircular bottom for the throat of the tooth.

By the use of this cheap and simple hand-punch the gumming of circular saws can be accomplished without the aid of more expensive presses or tools, and in a cheaper and better manner than by filing.

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

The combination of handle A, provided with enlarged head B, cam-lever E, punch D, die C, and spring D', substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 10th day of August, 1880.

EDUARD SENN.

Witnesses:

PAUL GOEPEL,
CARL KARP.