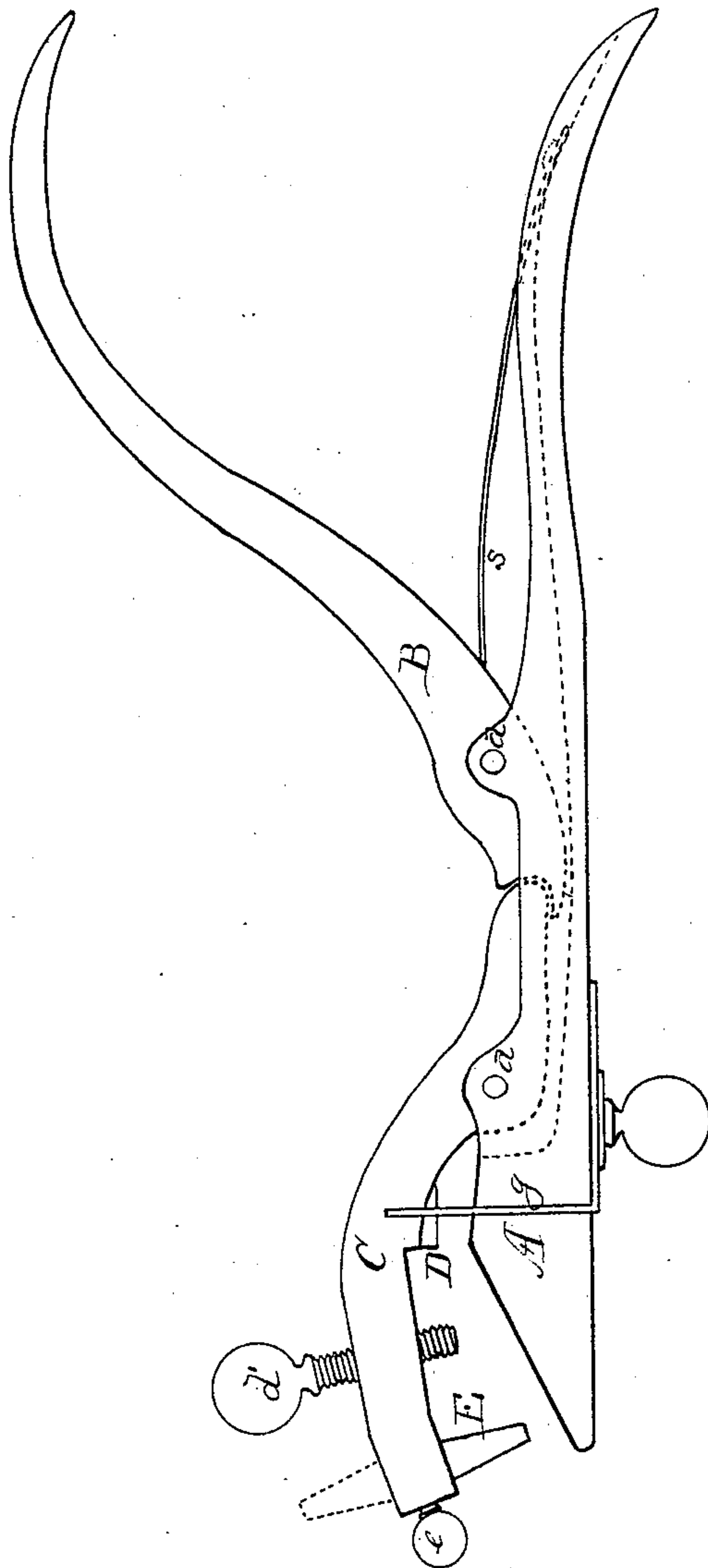


(No Model.)

W. G. AVERY.  
SAW SET AND PUNCH.

No. 282,600.

Patented Aug. 7, 1883.



*Witness,*

*A. B. Allen.*

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*By Geo. W. Tibbitts, Atty.*

# UNITED STATES PATENT OFFICE.

WILLIAM G. AVERY, OF CLEVELAND, OHIO.

## SAW-SET AND PUNCH.

SPECIFICATION forming part of Letters Patent No. 282,600, dated August 7, 1882.

Application filed October 12, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM G. AVERY, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful  
5 Improvements in Saw-Sets, of which the following is a specification.

In the accompanying drawing, the figure is a side elevation of my improved saw-set.

10 A is a jaw with a handle, which is the foundation or support for the working parts. It is chambered nearly its whole length, and provided with ears *d d*, in which are pivoted the handle-lever B and the gripping-jaw C. The lever B at its inner end engages with the inner end of the gripping-jaw. A spring, *s*, secured to handle A, operates to force the handles apart when released. The jaw A has a slanting face and forms the anvil upon which  
20 the saw-blade lies. Said jaw is also provided with an adjustable gage or guide, *g*, to adjust the tool to different sizes of saw-teeth. The movable or gripping jaw C is provided with a die, D, which grips the saw-tooth and bends it over the angle of the anvil A. Said jaw is  
25 also provided with a thumb-screw, *d*, for gagging the throw of the die. E is a hollow punch

adjustably fixed in said jaw C, to be used, when desired, for punching leather. The punch is held in place by a set-screw, *e*, so that the punch may be reversed in position, as seen in dotted  
30 lines, when not required for use. This renders this tool useful for two purposes, the jaw A serving as the surface against which the punch works in cutting.

Having described my invention, I claim— 35

1. The improved saw-set, consisting of the anvil-jaw A, with its chambered handle, having ears *d d* and spring *s*, and provided with the adjustable gage *g*, the lever-handle B, and the movable gripping-jaw C, having die D and  
40 gage thumb-screw *d*, constructed, combined, and operating substantially as specified.

2. The combination, with the jaw C, of the saw-set, and the cutting-punch E, adjustably fixed and held by the thumb-screw *e*, for punching  
45 leather in conjunction with the jaw A, substantially as specified.

WILLIAM G. AVERY.

Witnesses:

E. W. LAIRD,  
GEO. W. TIBBITTS.