

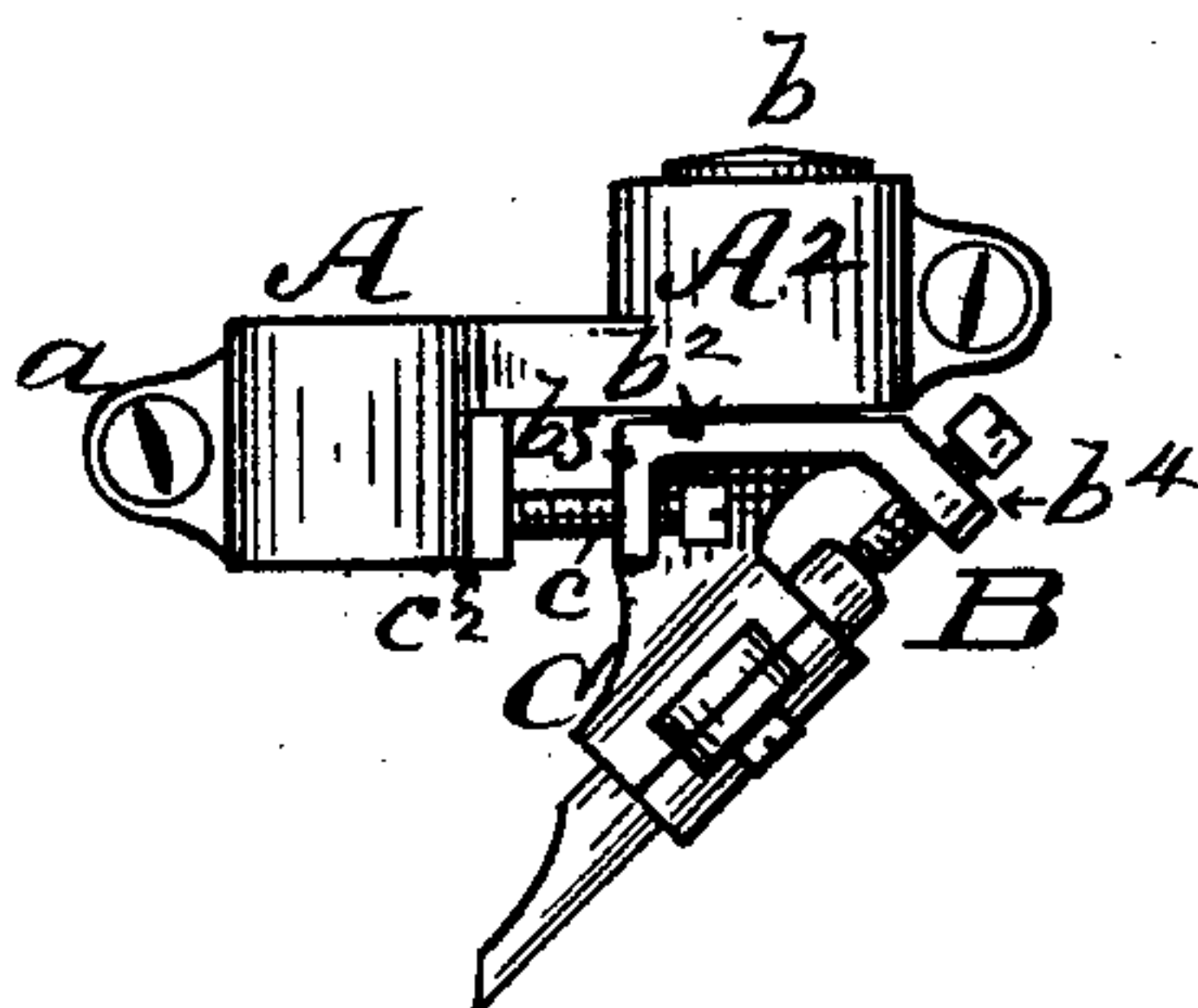
(No Model.)

A. E. FRANCIS.

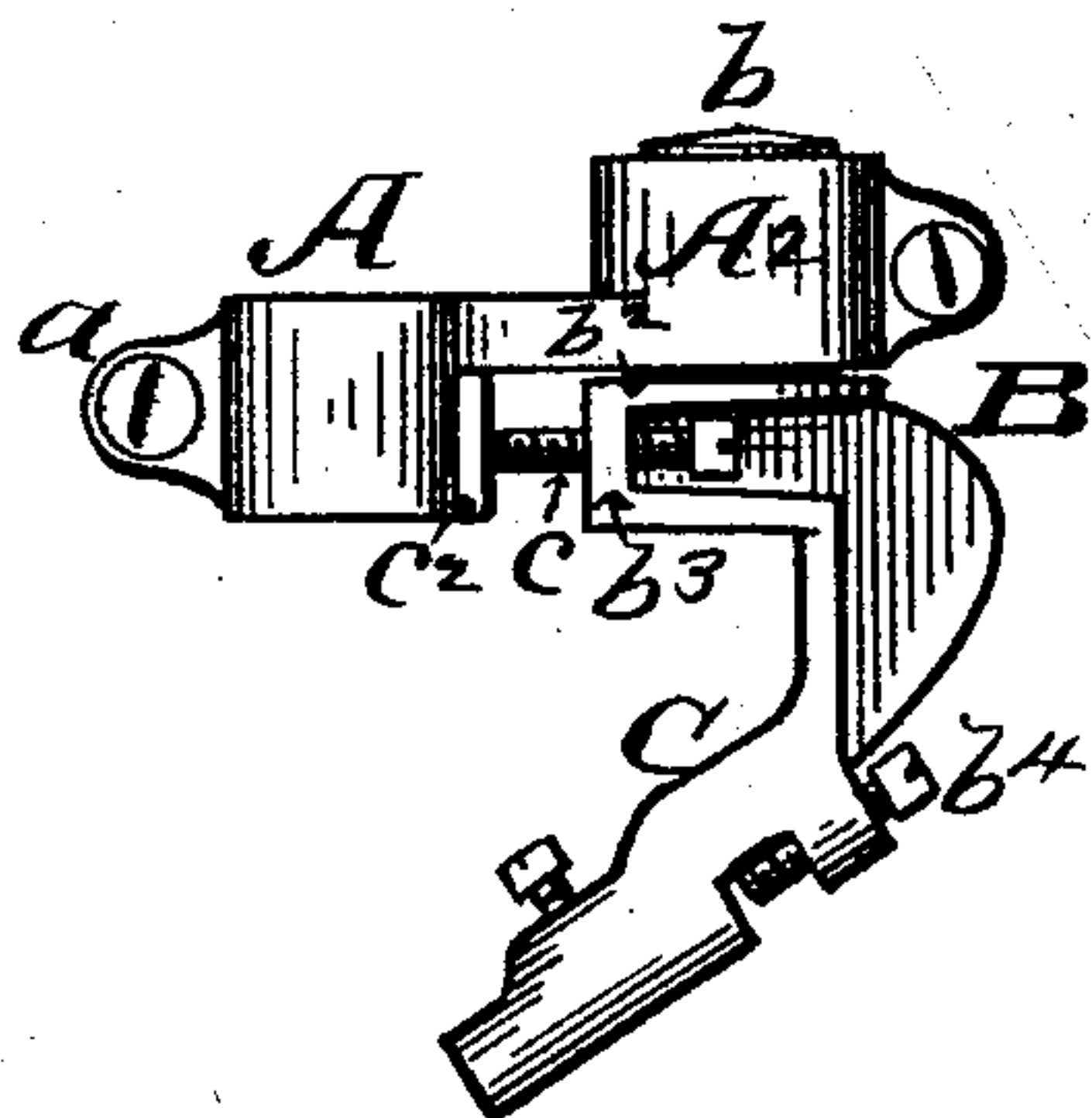
GRAVER HOLDER FOR ENGRAVING MACHINES.

No. 435,416.

Patented Sept. 2, 1890.



*Fig. 1.*



*Fig. 2.*

Witness,

H. C. Clarke.  
Abner Slutz

Inventor,

Allan E. Francis.  
per Geo. W. Tibbitts Attorney.

# UNITED STATES PATENT OFFICE.

ALLAN E. FRANCIS, OF CLEVELAND, OHIO.

## GRAVER-HOLDER FOR ENGRAVING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 435,416, dated September 2, 1890.

Application filed January 24, 1890. Serial No. 338,032. (No model.)

*To all whom it may concern:*

Be it known that I, ALLAN E. FRANCIS, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Graver-Holder, of which the following is a specification.

This invention relates to an adjustable holder for securing gravers to the graver-stock of engraving-machines; and it consists of the novel constructions and combination, as hereinafter fully described, and pointed out in the claim.

In the accompanying drawings, Figure 1 represents my new tool-holder having short tool-grip, and Fig. 2 shows the same with a long tool-grip.

A is a ring designed for attaching the holder to the lower end of the graver-stock of the engraving-machine. It is split on one side and has lugs or ears *a a*, through which a clamping-screw is placed. The ring A has an arm connecting it with a second ring *A*<sup>2</sup> like the first.

B is a tool-holder having a pin *b*, by which it is attached to said ring *A*<sup>2</sup>, and has a plate *b*<sup>2</sup>, with tool-socket C depending therefrom.

In the flanges *b*<sup>3</sup> on the plate are placed set-screws *c c*, bearing against lugs *c*<sup>2</sup> on the ring A, by means of which the tool-holder may be accurately adjusted for centering the tool-point.

The tool-socket C, in Fig. 1, is split on one side, and has ears or lugs with a clamping-screw. To the rear side of plate *b*<sup>2</sup> is provided a diagonal lug *b*<sup>4</sup>, having a set-screw designed for accurately setting the graver lengthwise in its socket. In Fig. 2 the set-screws are a little differently arranged for same purpose.

The object of this tool-holder, as will be readily seen, is to greatly facilitate accurate adjustment of the graver for nice work.

Having described my invention, I claim—

The graver-holder comprising split rings A and *A*<sup>2</sup>, having the clamping-screws, tool-holder B, having pin *b* adjustably held by ring *A*<sup>2</sup>, and provided with plate *b*<sup>2</sup>, flange *b*<sup>3</sup>, adjusting-screws C C, and tool-socket C, with set-screw *b*<sup>4</sup>, constructed substantially as described, and for the purpose specified.

ALLAN E. FRANCIS.

Witnesses:

GEO. W. TIBBITTS,  
ABNER SLUTZ.