

No. 885,058.

PATENTED APR. 21, 1908.

G. R. LANG.  
TOOL HOLDER.

APPLICATION FILED APR. 18, 1908.

Fig. 1.

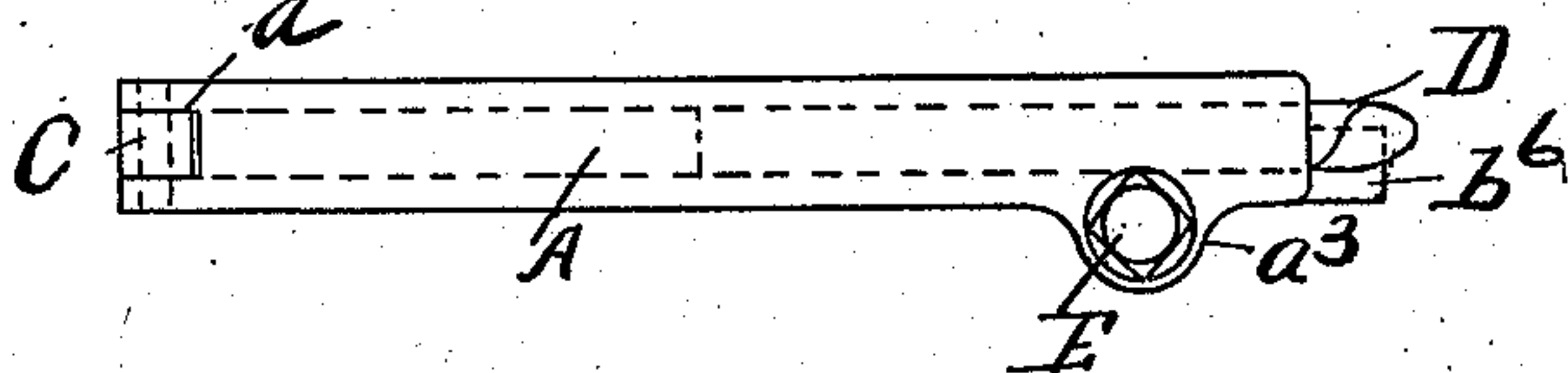


Fig. 2.

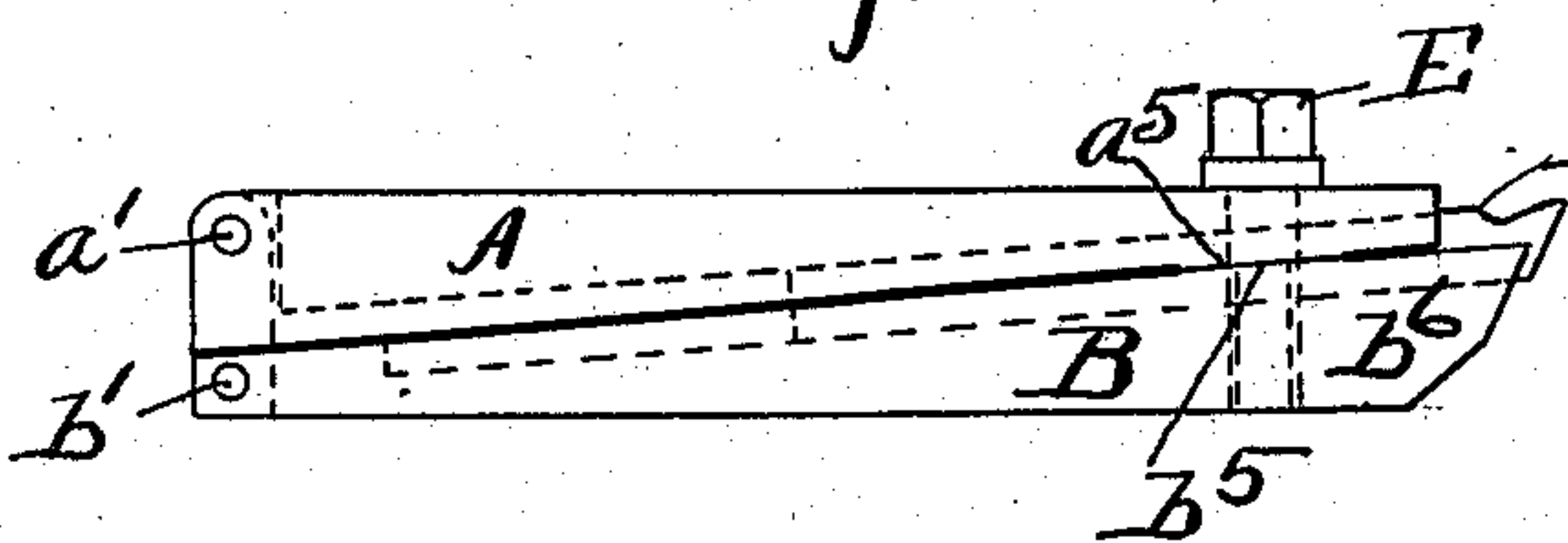


Fig. 3.

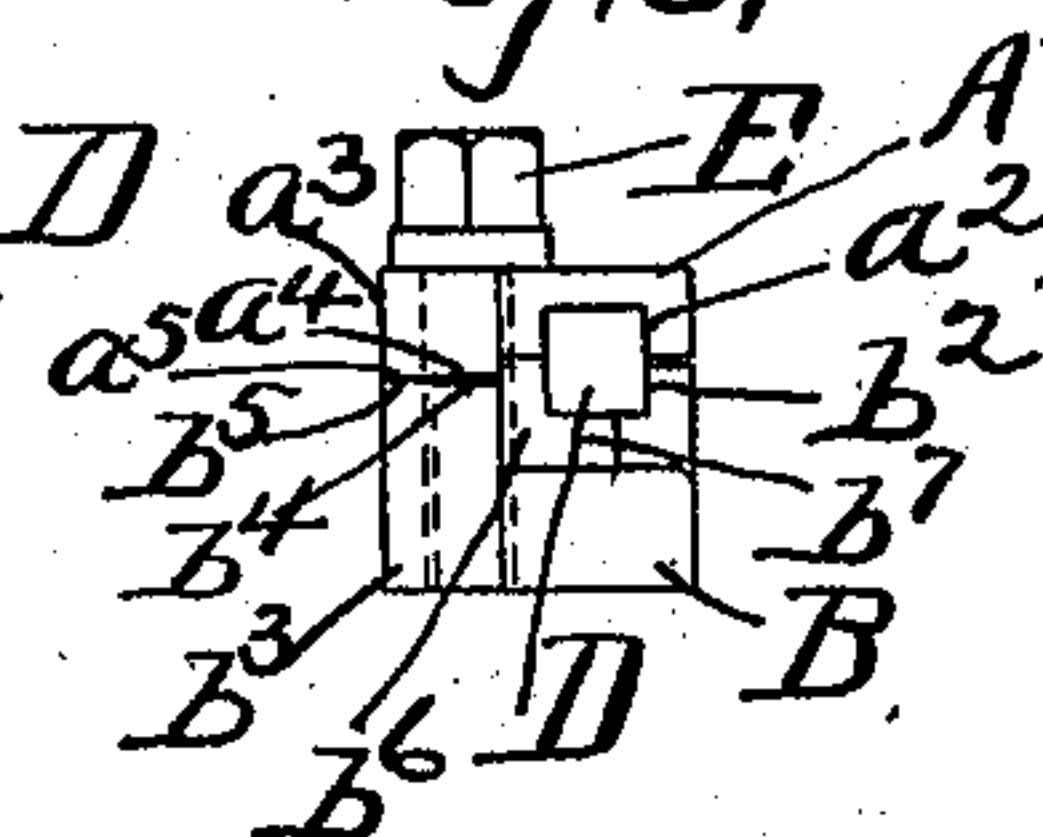
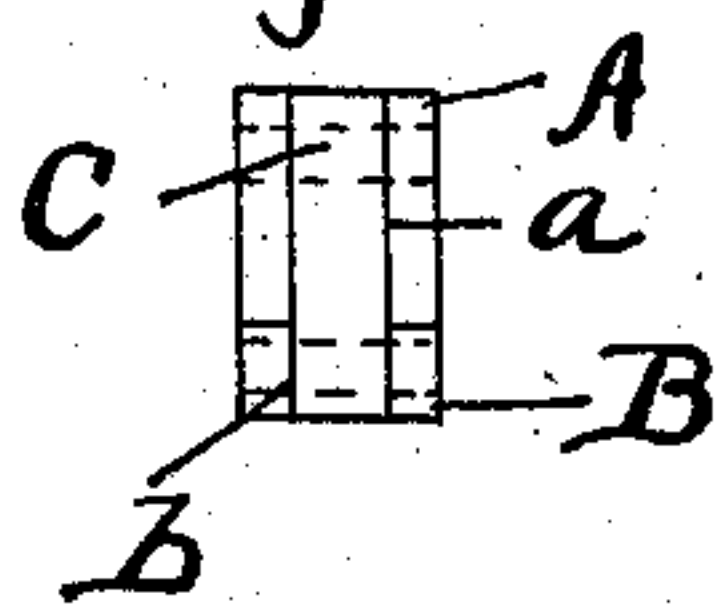


Fig. 4.



Witnesses  
Bessie F. Parker.  
W. C. Norton

Inventor  
George R. Lang  
by H. C. Lord  
Attorney

# UNITED STATES PATENT OFFICE.

GEORGE R. LANG, OF MEADVILLE, PENNSYLVANIA.

## TOOL-HOLDER.

No. 885,058.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed April 18, 1906. Serial No. 312,329.

*To all whom it may concern:*

Be it known that I, GEORGE R. LANG, a citizen of the United States, residing at Meadville, in the county of Crawford and State of Pennsylvania, have invented new and useful Improvements in Tool-Holders, of which the following is a specification.

This invention relates to tool holders and consists in certain improvements in the construction thereof as will be hereinafter fully described and pointed out in the claims.

The invention is illustrated in the accompanying drawings as follows:—

Figure 1 is a plan view of the tool holder. Fig. 2, a side elevation of the same. Fig. 3, a front elevation. Fig. 4, a rear elevation.

The tool holder has the upper section A and the lower section B. These sections have the slots *a* and *b* extending through the rear ends thereof from top to bottom and the tongue C is arranged in these slots. This is riveted by means of the rivet *b'* to the section B and is hinged by means of the pin *a'* on the section A, so that the two sections are hinged together. The opposing faces of the sections are provided with the grooves *a*<sup>2</sup> and *b*<sup>2</sup>. These grooves are in register when the sections are in proper position so that the tool D extends partly into both grooves. The groove is of such depth relatively to the thickness of the tool D that the faces of the sections do not quite contact.

The sections have the lugs *a*<sup>3</sup> and *b*<sup>3</sup> extending from the sides of the sections and near the front of the same. The clamping screw E is passed through the lug *a*<sup>3</sup> and screwed into the lug *b*<sup>3</sup>. The inner parts *a*<sup>4</sup> and *b*<sup>4</sup> of the faces of the lugs *a*<sup>3</sup> and *b*<sup>3</sup> are cut away so that only the outer edges *a*<sup>5</sup> and *b*<sup>5</sup> are in contact. The purpose of this is to make sure that the clamping effect of the screw is delivered on the tool D.

In order to better provide the tool holder for making a very heavy cutting, ordinarily known as a roughing cut, I provide the part B with the forwardly extending side lip *b*<sup>6</sup> and bottom lip *b*<sup>7</sup>. These extend to near the end of the tool and to points opposite the cutting edges of the tool so that with the deep roughing cut, the tool is supported at points directly opposite from the part under strain. With this construction, the light

steel used with these tools may be utilized with the roughing cut; this has not been heretofore usual.

It will be noted that the rear ends of the parts A and B are adapted to be inserted in an ordinary tool post and to receive the clamping action of the ordinary tool post screw so that while in use the tool D is subjected to not only the clamping effect of the screw E but also the clamping effect from the tool post.

What I claim as new is:

1. In a tool holder the combination of the upper and lower sections adapted when together to be inserted in the ordinary tool post of a lathe and to be clamped thereby and having longitudinal grooves in their opposing faces adapted to receive a tool and each provided with a laterally protruding lug near its front end with a projection from one of the opposing faces of the lugs on the side of the lug the more remote from the groove for engaging the opposing face of the opposing lug with the opposing faces of the lugs out of contact on the side nearer the groove when in parallel relation for the purpose described; and a clamping screw arranged in said lugs.

2. In a tool holder the combination of the upper and lower sections, having the longitudinal grooves in their opposing faces; a clamp at the front ends of said sections; and a hinge joint at the rear end of said sections comprising the tongue C arranged in the slots in the ends of the sections, the ends of the groove forming parts of the slots.

3. In a tool holder the combination of the upper and lower sections, having longitudinal grooves in their opposing faces; the lower section having the projecting lips *b*<sup>6</sup> and *b*<sup>7</sup> for supporting the side and bottom of an inserted tool at points opposite the cutting edge of the tool; and means for clamping the sections together.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEORGE R. LANG.

Witnesses:

CLINT DENSMORE,  
ROBERT MCWILLIAMS.