

(No Model.)

A. S. PATTON.
METAL FORMING TOOL.

No. 410,606.

Patented Sept. 10, 1889.

Fig. 1.

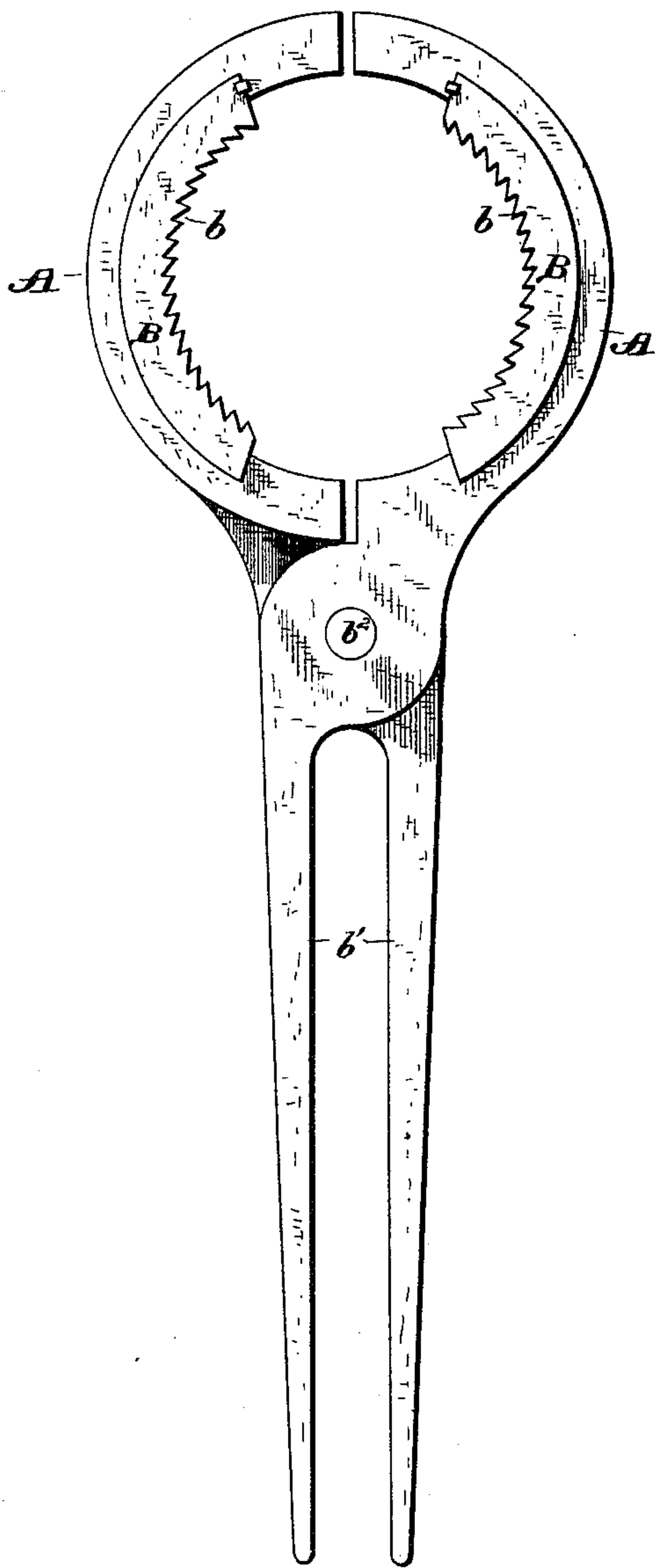
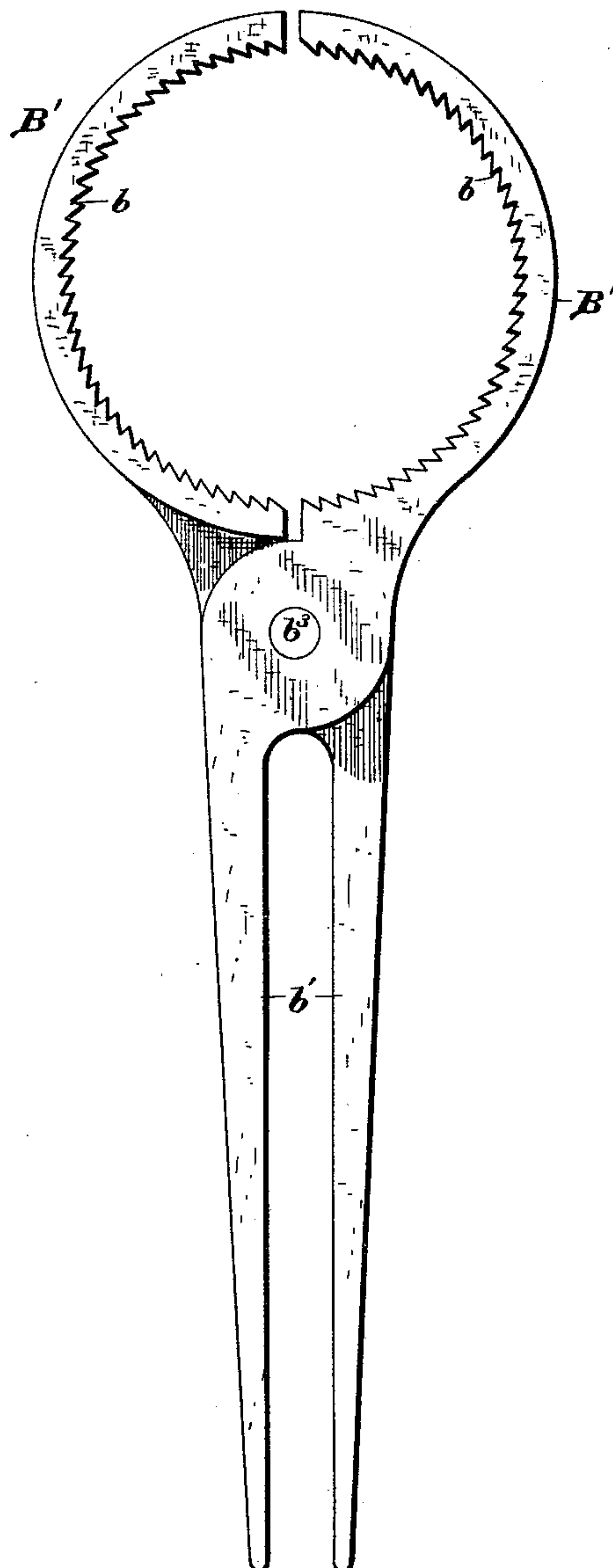


Fig. 2.



WITNESSES:

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METAL-FORMING TOOL.

SPECIFICATION forming part of Letters Patent No. 410,606, dated September 10, 1889.

Application filed June 16, 1888. Serial No. 277,398. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER S. PATTON, a citizen of the United States, residing at Creighton, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Tools for Rounding Off Square or other Irregular-Shaped Irons or other Metals; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to a tool for forming into a round shape pieces of iron or other metals.

In the accompanying drawings, Figure 1 is a full side view of my device, and Fig. 2 is a full side view of another form of such tool.

A A are jaws fixed to handles $b' b'$ by bolt or rivet at b^2 .

B B are corrugated dies, and are movable. $b b$ are corrugations on the concave sides of the dies B B.

In Fig. 2 I show a modification of my invention, wherein $B' B'$ are the jaws; b , the corrugations; $b' b'$, the handles joined or pivoted at b^3 .

The difference between the two tools is mainly in this, that in the tool shown in Fig. 2 there are no adjustable corrugated dies such as I show in Fig. 1. I expect that, as a rule, the trade will prefer the tool shown in Fig. 1, for the reason that it is constructed so as to receive new dies or different-sized dies, to be removed and changed at will, while in the tool shown in Fig. 2 this cannot be done. In the jaws A A there will be a dovetailed seat or recess to receive and hold the dies B B, the extremities of the seat or recess of each jaw being inclined or beveled in opposite directions to form the dovetailed seat, in which is fitted the removable die, which is beveled at its ends to adapt it to fit tightly therein. The dies B B will be held in place by keys or other suitable means, substantially as indicated in Fig. 1. The dies

B B are to have numerous and sharp corrugations, hardened, so as to be capable of reducing or shaping the desired metallic article. This is done by placing the article to be shaped lengthwise between the jaws of the tool, closing the jaws tightly down on the same, and then, by means of the handles $b' b'$ the work of reducing begins. This work is continued till the ends of the jaws come together, when it can proceed no further without changing tools or making a change in the size of the dies.

In size the dies B B will be various in length as well as in thickness. Although it is necessary for the corrugated sides of the dies to be concave, yet the reverse side need not necessarily be convex, for a flat surface will do as well by forming the jaws A A to conform thereto.

A tool formed as described and shown will be of great utility in shaping or working in places where a lathe cannot be had or where one could not be used. It will be comparatively small, so that it can be easily carried about, and hence much time will be saved and expense also.

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

1. A metal-working tool of the class described, consisting, essentially, of two segmental jaws formed integral with pivoted handles, and segmental dies fixed to the opposing edges of said jaws and having the serrated working-faces, substantially as and for the purpose described.

2. A metal-working tool for reducing oblong or other shaped metallic articles to an approximately-cylindrical shape, consisting, essentially, of a pair of segmental jaws formed integral with handles which are pivoted together, and the segmental dies conforming to the curvature of said jaws and removably fixed to the inner opposing edges of the jaws, said dies having the serrated working-faces, substantially as and for the purpose set forth.

3. A metal-working tool of the class described, consisting, essentially, of two seg-

mental jaws which are made dovetailed in cross-section, the pivoted handles, and the segmental dies tightly and removably fixed to the dovetailed edges of the jaws and having the serrated working-faces, substantially as and for the purpose described.

In testimony that I claim the foregoing I

hereunto affix my signature this 8th day of March, A. D. 1888.

ALEXANDER S. PATTON. [L. s.]

In presence of—

ROLFE M. HITE,
GEORGE DENNY.