G. Parr.

Making Metal Tools.

No. 45,854. Patented Jan. 10, 1865.

Fig: 1.

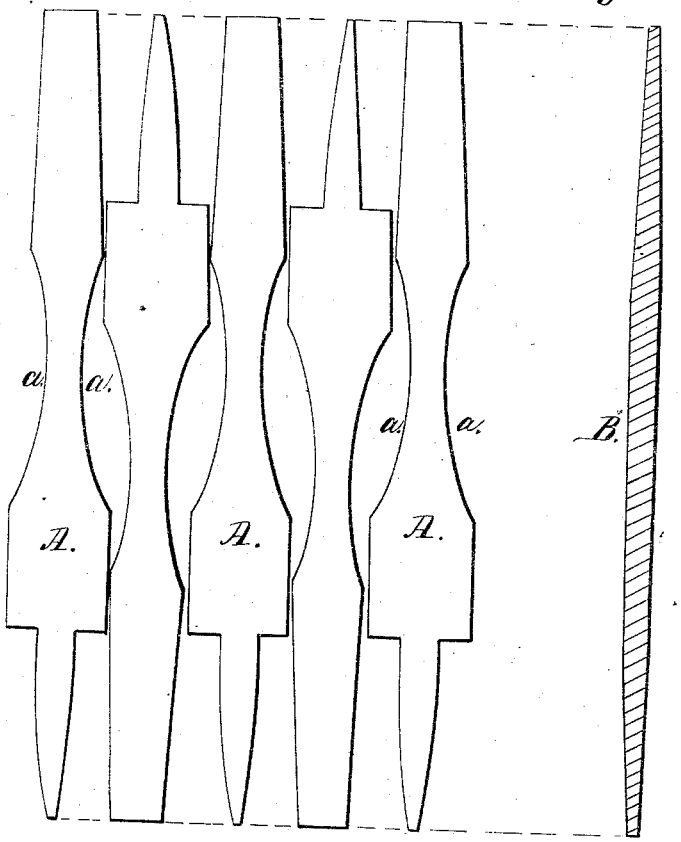
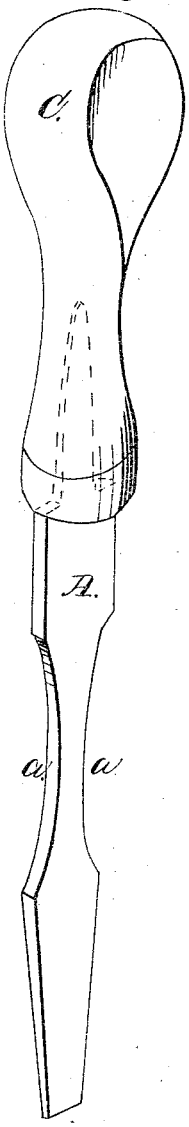


Fig: 2.

Fig: 3.



Witnesses;

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By E. B. Forbush his Attorney

UNITED STATES PATENT OFFICE.

GEORGE PARR, OF BUFFALO, NEW YORK.

IMPROVEMENT IN MODE OF MANUFACTURING SCREW-DRIVERS.

Specification forming part of Letters Patent No. **45,854**, dated January 10, 1865.

To all whom it may concern:

Be it known that I, GEORGE PARR, of the city of Buffalo, county of Erie, and State of New York, have invented a certain new and useful Improvement in the Manufacture of Screw-Drivers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon, making a part of this specification, in which—

Figure I is a plan of the screw-driver blade or blank, showing also the reversed positions of the blanks in punching them from the rolled plates, in order to prevent a waste of material. Fig. II is a transverse section (edge view) of the rolled plate from which the blanks are cut. Fig. III represents in perspective a completed screw-driver.

The nature of this invention consists in the manufacture of screw-driver blanks (or blades) and other like tools by a new mode or process which greatly reduces the cost of manufacture, and at the same time secures greater strength, symmetry, and perfection of the article when made.

To enable others skilled in the art to manufacture the said articles according to my improvement, I will describe my mode or process of manufacture.

In the first place I roll the metal from which the tool is to be made into plates or sheets by the application and use of mechanical devices common in rolling-mills. These plates are rolled three feet (more or less) in length, and of a width which just equals the length of the blank tool to be punched or cut therefrom, and a transverse section of which shall be the exact thickness and taper of the blank. These prepared metal sheets or plates are then taken to a punching-machine for punching or cutting the blank tool therefrom.

The punching-machine (which may be of common construction) is provided with suitable punches or dies for punching or cutting the blanks from the sheets or plates of metal, and are so accurately made that the blanks produced thereby, are nearly perfect in form, symmetry, strength, and finish. They are then put into the handle in a common manner.

The sheets or plates of metal are rolled thickest in the middle with a gradual taper each way from the middle to the edge. This is done in order to properly distribute the metal and proportionate it in such parts of the blade as will insure the requisite strength in all its parts without detriment to the form and symmetry of the article. Hence, although there is less width at the middle of the blade or blank, (occasioned by the scallops *a a*, which scallops are necessary in order to preserve the symmetry of the article,) yet there is greater thickness, and, consequently, requisite strength.

The sheets or plates are rolled of different thicknesses and widths, according to the size and quality of the tool designed to be made therefrom, and dies or punches are made of different sizes to correspond.

It is obvious that this process is a great saving in the cost of manufacture. At least one hundred per cent. is saved by this process, and a more uniform, perfect, and better article is produced, and furnished to the public at a much less expense.

A is the blank or blade; *a a*, scallops in the same; B, transverse section (edge view) of rolled plate, *c*, handle.

I claim—

Manufacturing screw-driver blanks or blades and other similar tools by the process substantially as herein described.

GEORGE PARR.

Witnesses:

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