E. BENNETT.

Implement for Grooving the Mouths of Glass Bottles.

No. 55,988. Patented July 3, 1866.

Fig. 1.

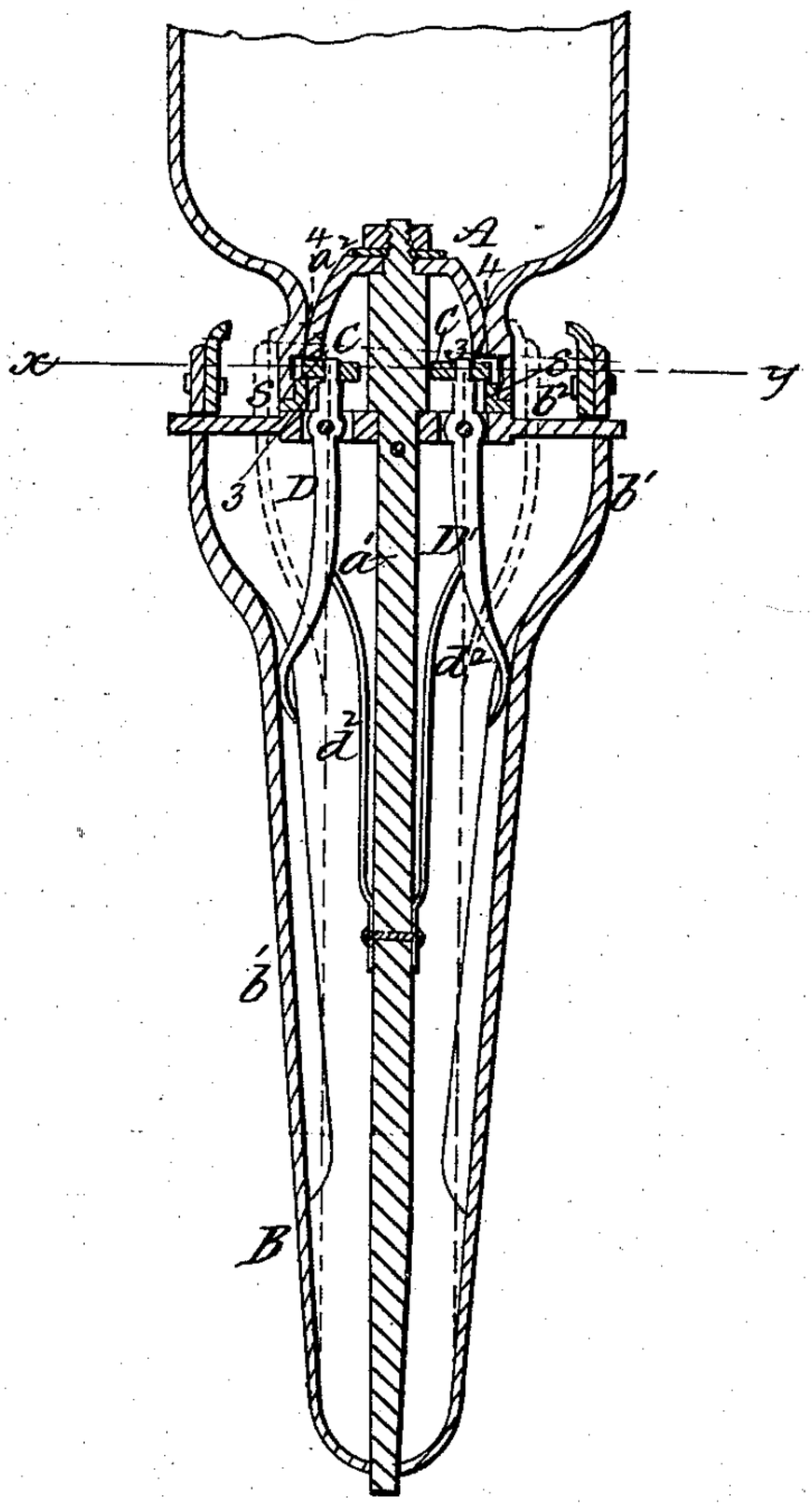
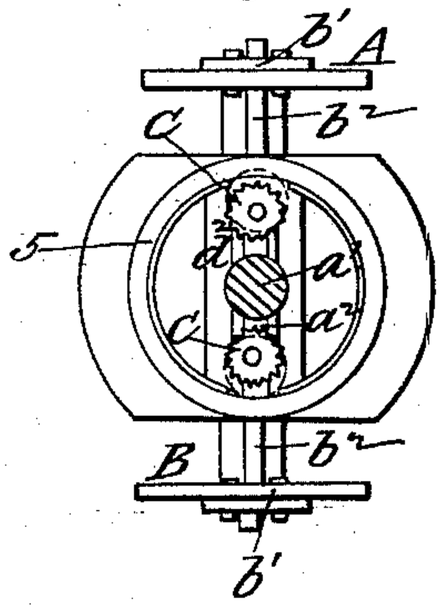


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

EDWIN BENNETT, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVED IMPLEMENT FOR GROOVING THE MOUTHS OF GLASS BOTTLES.

Specification forming part of Letters Patent No. **55,988**, dated July 3, 1866.

To all whom it may concern:

Be it known that I, EDWIN BENNETT, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in the Implement for Grooving the Mouths of Glass Jars and Bottles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a central longitudinal section of the well-known glass-blower's bottle-clamp having my said improvement applied thereto, and Fig. 2 a transverse section of the same on the dotted line *x y* of Fig. 1.

Like letters and numbers of reference indicate the same parts when in both figures.

The object of my improvement is to make the tool produce a groove having a corrugated or roughened bottom around in the inside of the neck or mouth of a glass jar or bottle while in the plastic state, for the purpose of holding and preventing the packing afterward applied in the said groove from being moved around therein by the operation of screwing the stopper within it in closing the mouth of the said jar or bottle air-tight, and has a special relation to the construction of the fruit-preserving glass jars for which a patent was granted to me dated the 6th day of February, 1866.

My invention consists in the application to a glass-blower's bottle-clamp, constructed substantially as hereinafter described, of two small rotary disks or wheels having their peripheries cut into sharp-edged teeth, and operated by levers or their equivalent, so that in closing and moving the clamp around the neck of the jar or bottle while in a plastic state the said toothed wheels will be caused to produce the required corrugated or roughened groove therein.

In the drawings, A B is the clamp, C C′ the toothed wheels, and D D′ the levers upon which the wheels rotate.

The clamp A B is made of iron and steel, and consists of a central stem, *a′*, provided with a head or mouth piece, a^2, and two spring-clamps, *b′ b′*, guided by a transverse stem, b^2, near the head, the said parts being arranged and connected together, so that when the mouth and neck of the plastic jar or bottle is slipped over the head a^2, and the spring-clamps *b′ b′* then pressed toward each other in the operator's hand, the clamping ends of the same will be pressed in contact with the outside of the said neck and keep it securely upon the said head. (See Fig. 1, the faint lines representing the jar or bottle and the dotted lines the clamps in contact therewith.)

The toothed wheels C C′ are secured upon their respective levers D D′, so as to be rotated freely when moved around in contact with the inside of the neck of the plastic jar or bottle.

The levers D D′ have their fulcra in mortises in the transverse stem b^2 and their power ends kept in contact with the respective inner sides of the clamp-springs *b′ b′* by means of two springs, d^2 d^2.

The head a^2 is hollow, and has two side openings, 3 3, which allow the edges of the wheels C C′ to be freely thrust out sufficiently beyond two opposite sides of the head a^2 to make the required corrugated or roughened groove in the neck or mouth of the jar or bottle.

Operation: The mouth of the glass vessel, while in its plastic condition, is slipped over the head a^2, and the spring-clamps *b′ b′* then immediately pressed toward each other in one of the hands of the operator, while, with his other hand controlling the vessel, the wheels C C′ are easily thrust out, and the corrugated or roughened groove required is readily and quickly formed by rotating the clamp and the vessel in opposite directions. Then, by releasing his grasping pressure on the spring-clamps *b′ b′*, the wheels C C′ are withdrawn from the groove which has been formed to their normal positions shown in the drawings, and the glass vessel finally removed from the head a^2.

The diameter of the head a^2 is made a little less at 4 than at 5, so as to make the mouth of the vessel a little less in diameter below the groove than it is above it, (see Fig. 1,) for the purpose of better resisting the downward pressure in introducing the stopper.

This is a very easily operated and effective

invention for producing the required corrugated or roughened grooves in glass jars or bottles.

What I claim as my invention, and desire to secure by Letters Patent, is confined to the following, viz:

The application to a glass-blower's bottle-clamp of the toothed wheels C C′, the same being arranged and operated substantially as and for the purpose described.

EDWIN BENNETT.

Witnesses:

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