

W. H. MAXWELL.

TOOLS FOR CRIMPING LAMP-CHIMNEYS.

No. 173,801.

Patented Feb. 22, 1876.

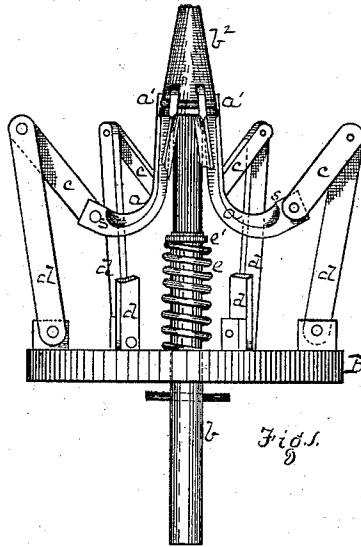


Fig. 1.

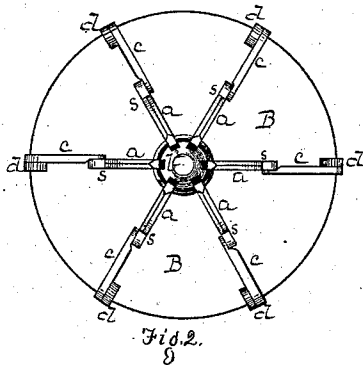


Fig. 2.

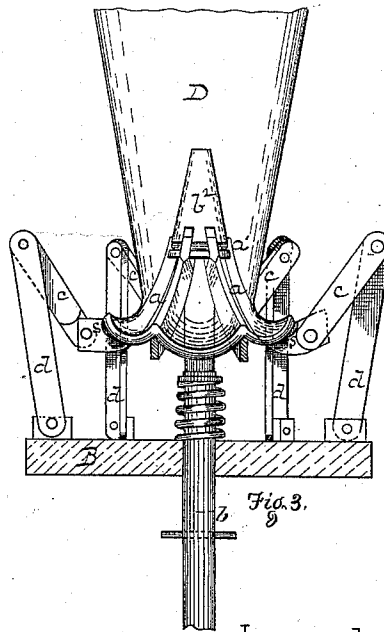


Fig. 3.

WITNESSES.

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UNITED STATES PATENT OFFICE.

WILLIAM H. MAXWELL, OF PITTSBURG, PA., ASSIGNOR TO THE KEYSTONE
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IMPROVEMENT IN TOOLS FOR CRIMPING LAMP-CHIMNEYS.

Specification forming part of Letters Patent No. 173,801, dated February 22, 1876; application filed
January 6, 1876.

To all whom it may concern :

Be it known that I, WILLIAM H. MAXWELL, of Pittsburg, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Tool for Crimping Lamp-Chimneys; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a side elevation of my improved crimping-tool, with two of the series of crimping-blades broken away, and illustrating the position of the blades at the commencement of the crimping operation. Fig. 2 is an end view or diagram of the same; and Fig. 3 is a view similar to that shown in Fig. 1, but illustrating the position of the blades at the end of the crimping operation, and showing a portion of a glass lamp-chimney thereon.

My improved tool is designed for forming crimps or scallops on the open end of a glass lamp chimney, or other similar article, so as to bring it to the form substantially as represented in Fig. 3. Through the center base of the plate or head B, I pass the stem *b*, with its forward end projecting far enough to carry a series of curved crimping-blades, *a*, which are pivoted thereto in any suitable way, one such being represented at *a'*. The tapering point or cone *b*² of the stem *b* may be used or not, as preferred. Surrounding the stem *b*, and at a little distance therefrom, and supported by the head B, are a series of posts, *d*, the upper ends of which are connected by swinging links or arms *c* to the lower and outer ends of the pivoted blades *a*, the connections of the links *c* at either or both ends being such as to permit the pivoted blades *a* to swing outwardly on a depression or partial withdrawing of the stem *b*.

To force the stem *b* outward and hold the pivoted blades *a* in proper position for the reception of the glass lamp-chimney, as represented in Fig. 1, I make use of a spiral spring, *e*, bearing at one end against the head B and at the other end against any suitable collar or stop, *e'*.

The curvature of the blades *a* should be such, or about such, as is desired in the flare of the crimps of the chimney D, and preferably these blades are made each with a

shoulder or stop, *s*, at such point on all as will arrest the crimping or flaring operation simultaneously and uniformly on all sides. The chimney then while still on the punty is slipped on over the cone and blades of the tool and pressed downward, so as to compress the spring *e*, force the blades *a* downward and outward to the position shown in Fig. 3, by which operation such parts of the heated glass as come against the blades *a* are flared outward so as to give it the form and appearance desired, and substantially as represented at D. But in the use of the pivoted blades *a* I do not limit myself to the specific mode shown of pivoting the curved blades, since this element of my invention may be varied somewhat without any substantial departure therefrom. The essential elements are that they shall be movable and pivoted; shall be of curved form on their scalloping edge, and shall operate by a retrogressive sliding movement on their stem, or toward the head which carries them.

The posts *d* may be fixed, or may also have a hinge or pivot-joint at their lower ends; also, instead of relying on the pressure applied solely by the punty through the chimney to force the blades back and out, the operator may, when the chimney is placed in position, draw the stem backward by hand with like useful result.

I make no claim to stop *s* separately considered, nor to curved blades, otherwise than as hereinafter claimed.

I claim herein as my invention—

1. A series of movable, curved, pivoted scalloping-blades, operated by a retrogressive sliding and expanding movement on the end of the lamp-chimney, substantially as set forth.

2. The swinging pivoted crimping-blades *a*, in combination with connecting links or arms *c*, posts *d*, and stem *b*, substantially as set forth.

3. A crimping-tool, consisting of a head, B, stem *b*, crimping-blades *a*, connecting-links *c*, and end posts *d*, substantially as set forth.

In testimony whereof I have hereunto set my hand.

WILLIAM H. MAXWELL.

Witnesses :

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GEO. H. CHRISTY.