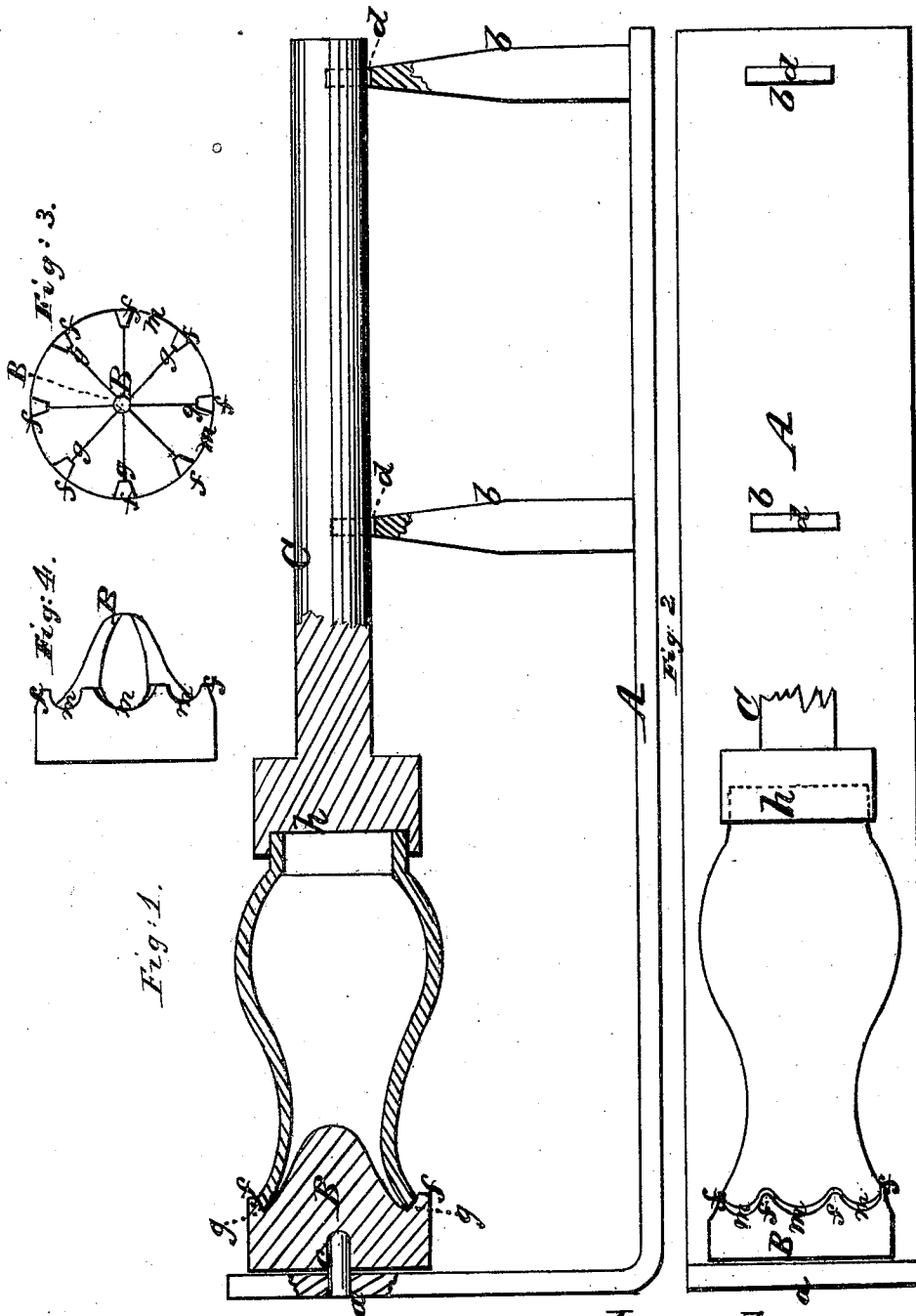


P. ZIMMERMAN.

MACHINE FOR FLARING AND CRIMPING LAMP-CHIMNEYS.

No. 170,616.

Patented Nov. 30, 1875.



Witnesses
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UNITED STATES PATENT OFFICE.

PAUL ZIMMERMAN, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR FLARING AND CRIMPING LAMP-CHIMNEYS.

Specification forming part of Letters Patent No. **170,616**, dated November 30, 1875; application filed November 11, 1875.

To all whom it may concern:

Be it known that I, PAUL ZIMMERMAN, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Machines for Flaring and Crimping Lamp-Chimneys and other tubular glassware; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view, partly in section and partly in elevation, of my improved flaring and crimping guide or machine. Fig. 2 is a plan view of the same, with a part of the handle of the snap or tool to which the lamp-chimney is attached removed. Fig. 3 is a front view of the corrugated cone which flares and crimps the lamp-chimney or other tubular article of glassware. Fig. 4 is a side view of the part shown in Fig. 3.

My invention relates to an improvement in the machine shown in T. B. Atterbury's patent, granted in 1866, for opening, fluting, or crimping smoke-bells, shades, or chimneys, and other tubular articles of glassware; and the nature of my invention consists, first, in a socketed snap or tool, to which the glass article is attached, mounted upon a frame with guides, which control and direct the tool, in combination with a fluted cone attached to the frame, with its axis in line with the axis of the snap or tool, whereby the article of glassware is held truly in center, and is capable of being moved with the article toward and from the cone without getting out of its true position.

In the accompanying drawings I have shown my invention as constructed for flaring and crimping lamp-chimneys; but in practice the application will not be confined to such articles, as smoke-bells, shades, and any other article of glassware which requires to be flared and crimped or scalloped after it has been previously molded, or produced in any manner without being flared and crimped in the first process, may be operated upon.

A in the drawings represents a frame with an

end-bearing, *a*, and upright guides *b b*. The bearing *a* is provided with a pivot, *c*, and the guides *b b* are constructed with half-round notches *d d* in their upper ends. To the pivot *c* a fluted cone, B, is fastened, and upon the guides *b b* a "snap" or tool, C, is placed, so that its stem fits snugly in the half-round notches *d d*, as shown.

The cone is peculiar in having the divisions *f f*, between its scallops *m m*, extended up above the base of the cone, as shown in Fig. 1, and with a narrow space, *g*, between the circumference of the cone and their inner sides.

By this construction portions of the end of the lamp-chimney or other article being flared and crimped have a chance to enter between the cone and the stops, while other portions are allowed to spread out into the scallops around the base of the cone, and by this means the spreading of the glass article beyond a determined extent on any side of its center is prevented without interfering with the proper flaring and scalloping or crimping of the same.

The snap or tool C is constructed with a socket, *h*, in its head, into which the base of the glass chimney or other article is fitted snugly, and it, with the chimney attached, is moved toward the cone in the semicircular notches *d d* of the guides *b b*, and as it moves it is steadied by the guides and kept truly in center with the axis of the cone.

The cone may be placed on a vertical axis or horizontal base-support, and the guides *b b* may be set at right angles to the axis of the cone, under which construction the snap or tool would be moved vertically instead of horizontally in the semicircular notches *d d*.

I do not claim as my invention the stops and scallops at the base of the cone.

What I claim is—

The combination of the snap or tool C, guide-frame A, and "former" or cone B, substantially as and for the purpose described.

PAUL ZIMMERMAN.

Witnesses:

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