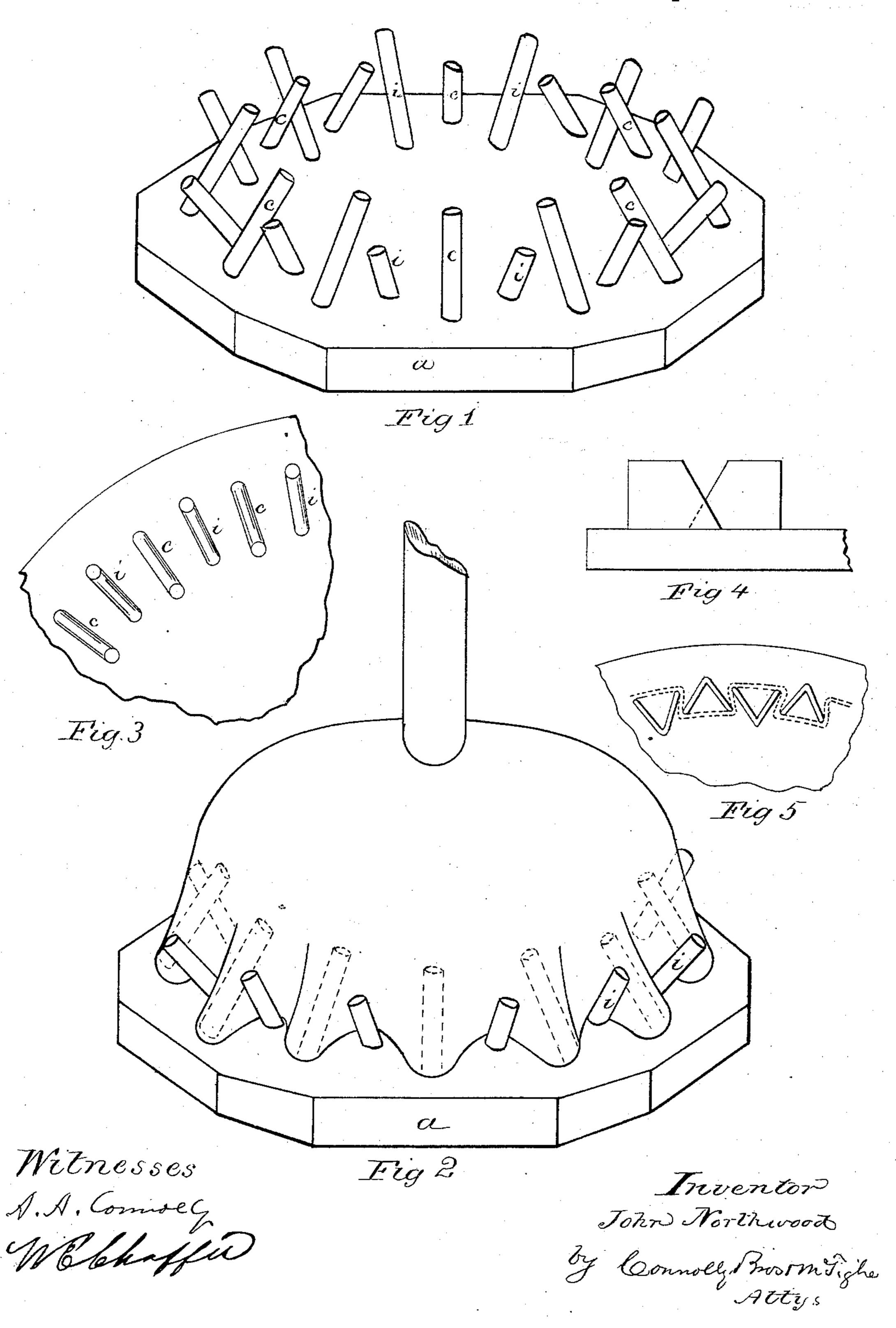
## J. NORTHWOOD.

### CRIMPING DEVICE FOR GLASSWARE.

No. 327,406.

Patented Sept. 29, 1885.



# United States Patent Office.

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### CRIMPING DEVICE FOR GLASSWARE.

SPECIFICATION forming part of Letters Patent No. 327,406, dated September 29, 1885.

Application filed August 3, 1885. (No model.) Patented in England February 1, 1884, No. 2,508.

To all whom it may concern.

Be it known that I, John Northwood, of Brierly Hill, in the county of Stafford, England, have invented certain new and use-5 ful Improvements in Crimping Devices for Glassware, (for which I have obtained Letters Patent in Great Britain No. 2,508, dated February 1, 1884;) and I do hereby declare that the following is a full, clear, and exact so description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a device for crimping or scalloping the edges of glass articles such as lamp-chimneys, smoke-bells, gas and lamp shades—and, in fact, any form or design of glassware. These articles have heretofore 20 been crimped by means of hand-pinchers or by molds, or by being forced edgewise against a series of radial blades or ribs. The hand process is too slow and expensive, and the molding process requires a costly assortment of 25 molds, and is, besides, laborious. The method of crimping by means of a series of radial blades or ribs is more simple and cheap, but has a tendency to give the glass article a wrinkled form at the crimps by acting to push it into 30 itself and thickening it just where it is desirable to give it a graceful and neat appearance.

My object is to crimp the ware quickly and easily, and to produce a neat and graceful effect by preserving the glass in an unwrinkled

35 and unthickened condition.

Accordingly, my invention consists in a suitable base or body having a double series of pins, ribs, or guides, with their working. edges inclined alternately in opposite direc-40 tion, substantially as hereinafter fully described and claimed.

The accompanying drawings show a crimper adapted for crimping the edge of a vase or a

smoke-bell.

Figure 1 is a perspective view of the crimper, and Fig 2 a similar view with the vase shown in the position occupied after being pushed down between the crimping-guides. Fig. 3 is a plan view of a portion of the device, showing the alternating direction of the guides 50 more distinctly. Figs. 4 and 5 are details.

A designates the base, which may be of wood, slate, fiber, metal, or any other material found suitable. Upon or into this base I fix two rows of pins or guides, which in this 55 case form two circles. The pins care inclined and lean radially toward a common center at an angle, preferably, of thirty degrees. The inner circle of pins, i, lean outwardly at about a similar angle, so that the conical surfaces 60 described by the two series of pins would intersect each other on a circle some distance above the base A. There is thus produced a sort of trough between the guides, forming a V-shaped annulus, in which the edge of the 65 article is guided to a symmetrical position or centered. Upon being pushed down farther (the glass having been previously softened at the glory-hole furnace) the edge follows down the outer edges of the inwardly-leaning pins 70 c, and is by them forced outwardly, and the inner edge of the outwardly-leaning pins i, and is by them forced inwardly; and as these pins alternate or stagger the glass is thrown into a waved line or crimp, which is perfectly 75 regular, and conforms to the design exactly, without exhibiting any tendency to thickening or wrinkling.

The design may be infinitely varied at a very trifling cost. It is obvious that as the inop-80 erative sides of the pins have no contact with the glass they may be extended, and the device would then be a series of blades with adjacent edges oppositely inclined and staggering as before, as indicated by Fig. 4.

Flat crimps may be made by having the pins made as loops or wide blades, as indicated by Fig. 5, where the style of crimp pro-

duced is shown by the dotted lines.

Wood, iron, composition, or any other suit- 90 able material may be used in inserting and fixing the guides, which latter may be of iron or any other suitable material, and which may be round, triangular, ovoid, or any other desired shape or form, according to the design 95 required.

What I claim as my invention is as follows: 1. The crimping device for glassware, con9

sisting of a number of guide pins or blades, c i, arranged in two rows, with their adjacent edges inclined in alternately opposite directions, substantially as described.

2. The crimping device for glassware, consisting of a suitable base, A, having two rows of guide pins or blades, ci, projecting therefrom, and having their adjacent edges overlapping and alternately oppositely inclined, substantially as described.

3. The crimping device for glassware, consisting of a suitable base having two series of

inclined pins projecting in alternately opposite directions and adapted to receive between them the edges of articles of glassware, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

#### JOHN NORTHWOOD.

Witnesses:

WILLIAM HUSSELBEE,
GEO. SAWKINS.