C. J. Miller S.

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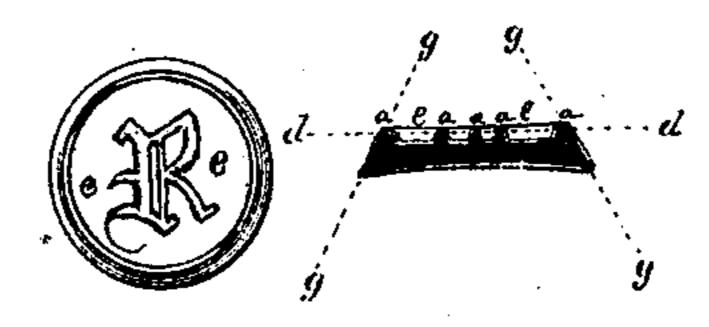
Falested Feb. 9.1869.

Fig 1.



a l aca l a

Fig 2.



Fig'3,	
1'ig 4.	

Witnesses.

Affoliok Missailen Inventor,

Celius & Richards Ly nis Aug Jame A Bonnell,



CELIUS E. RICHARDS, OF NORTH ATTLEBOROUGH, MASSACHU-SETTS.

Letters Patent No. 86,864, dated February 9, 1869.

ORNAMENT FOR JEWELRY, &c.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Celius E. Richards, of North Attleborough, in the county of Bristol, and State of Massachusetts, have invented a new Manufacture of Glass Ornament for Setting in Jewelry, &c.; 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, making part of this specification, in which—

Figure 1 is a plan and section of the said glass ornament.

Figure 2 is a plan and section of said ornament, moulded in form, but uncut.

Figure 3 is a plan, and

Figure 4 is an edge view of a piece of "strata-glass," so called, from which said ornament is produced.

Similar letters indicate like parts in all the figures. My invention consists of a new ornament for setting in jewelry, produced from glass in different-colored strata, by displacing the strata from their original position in the formation of the piece, by pinching or moulding, and afterwards removing a certain portion of one or more of the strata, to give it the requisite form and ornamental effect, by grinding and polishing, in the usual way of cutting such ornaments of precious stones.

The "strata-glass" from which the said ornament is produced is composed of two or more contrasting-colored strata, lying parallel to each other, and for convenience of handling may be in the form of a strip like that represented in figs. 3 and 4. This strip is rendered plastic by heat, and while in this condition a piece is cut therefrom, in the required form, by means of a

pair of dies, in the two opposite jaws of a pair of pincers, which dies, besides cutting out the piece, also produce thereon a design, emblem, or initial, in relief, from a like figure cut into the ground-face of one of the dies, and which has the effect, by the pinching-operation, to displace the strata, as shown in fig. 2, the upper, light strata being depressed, at e e, and the lower, darker strata being elevated, as at a a, above the plane of the former, ee. The back of the piece is also slightly depressed or concaved, to throw or compress the material of the dark strata well into the sharp and minute features of the die, thus producing the moulded piece shown in fig. 2. The prominent portions of the upper strata, constituting the design and border, are then cut away, by grinding off the face and periphery of the piece in the plane of the dotted lines d, g g, fig. 2, which exposes the darker strata in the design and border on the light ground of the depressed upper strata e e, and produces a highly-ornamental effect, similar to that of designs cut in (strata) precious stones, as, for instance, the sardonyx and cameo-shell, with the advantage that the glass ornament is quite as durable, and comparatively inexpensive.

What I claim, and desire to secure by Letters Pat-

The ornament for jewelry, moulded and cut from strata-glass, substantially as herein described, as a new article of manufacture.

CELIUS E. RICHARDS.

Witnesses:

S. SCHOLFIELD, STEPHEN ESSEX.