

(No Model.)

J. ROTHSCILD.

METHOD OF ORNAMENTING METAL PLATES FOR JEWELRY.

No. 302,036.

Patented July 15, 1884.

Fig. 1.

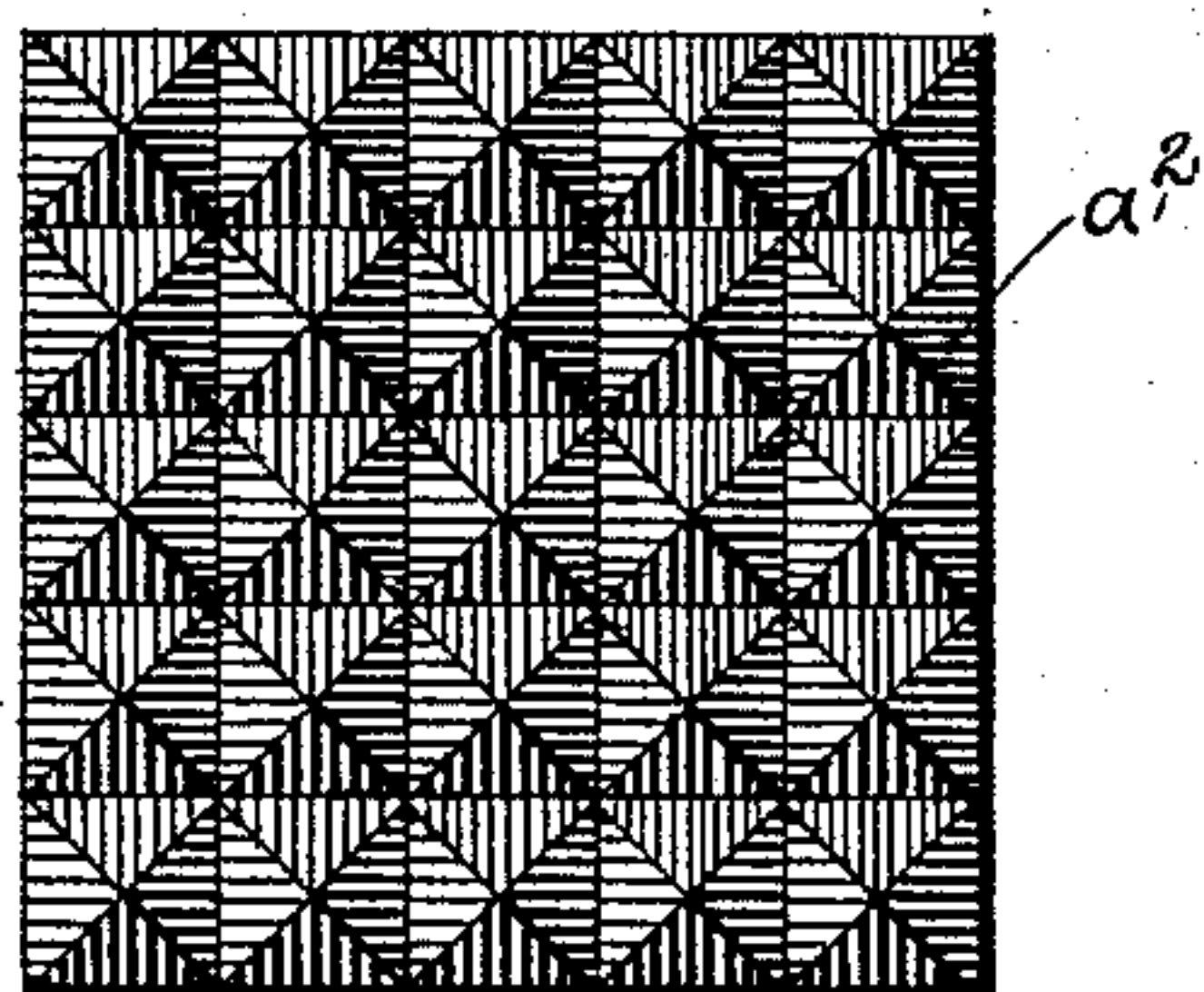


Fig. 2.

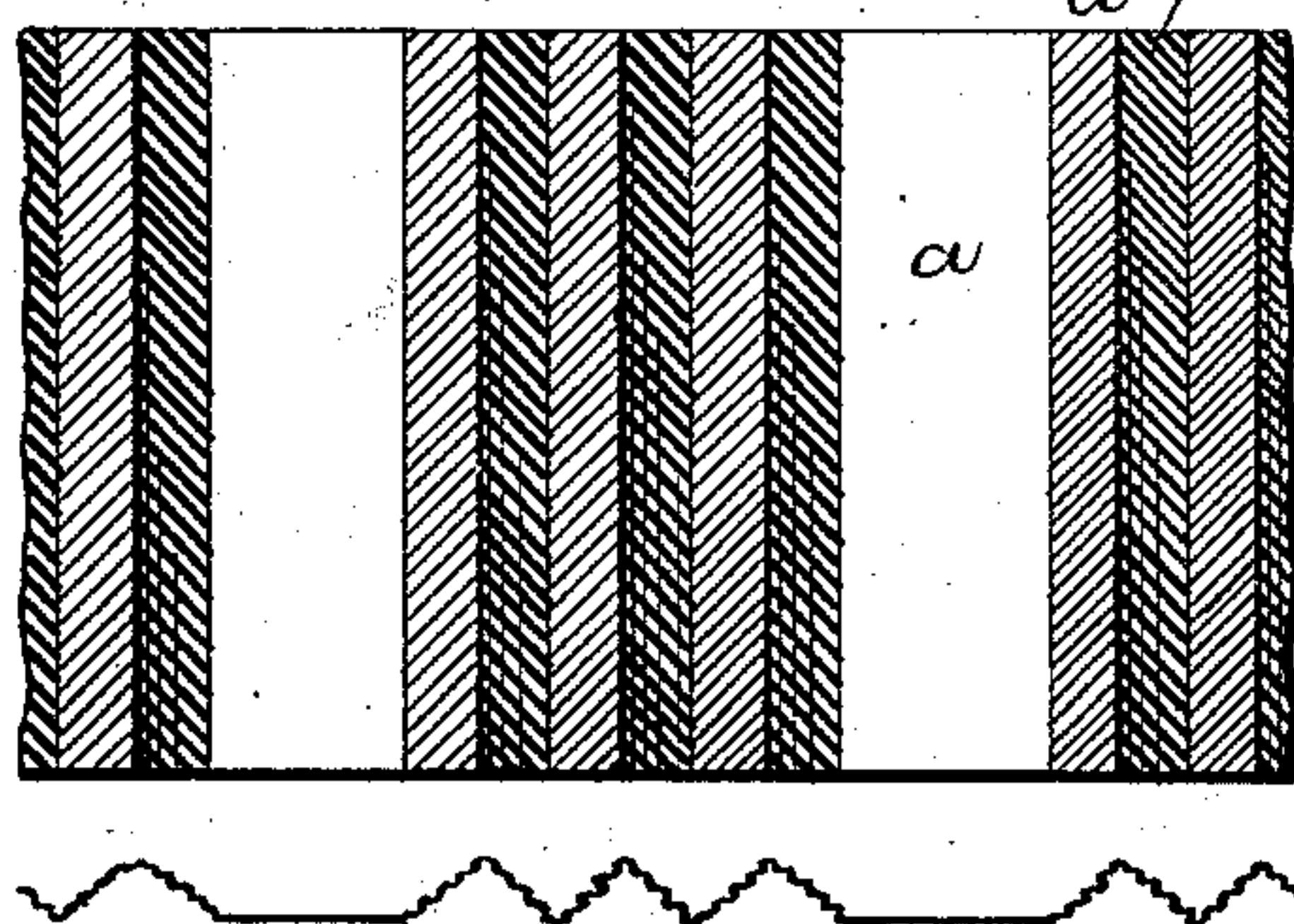


Fig. 3.

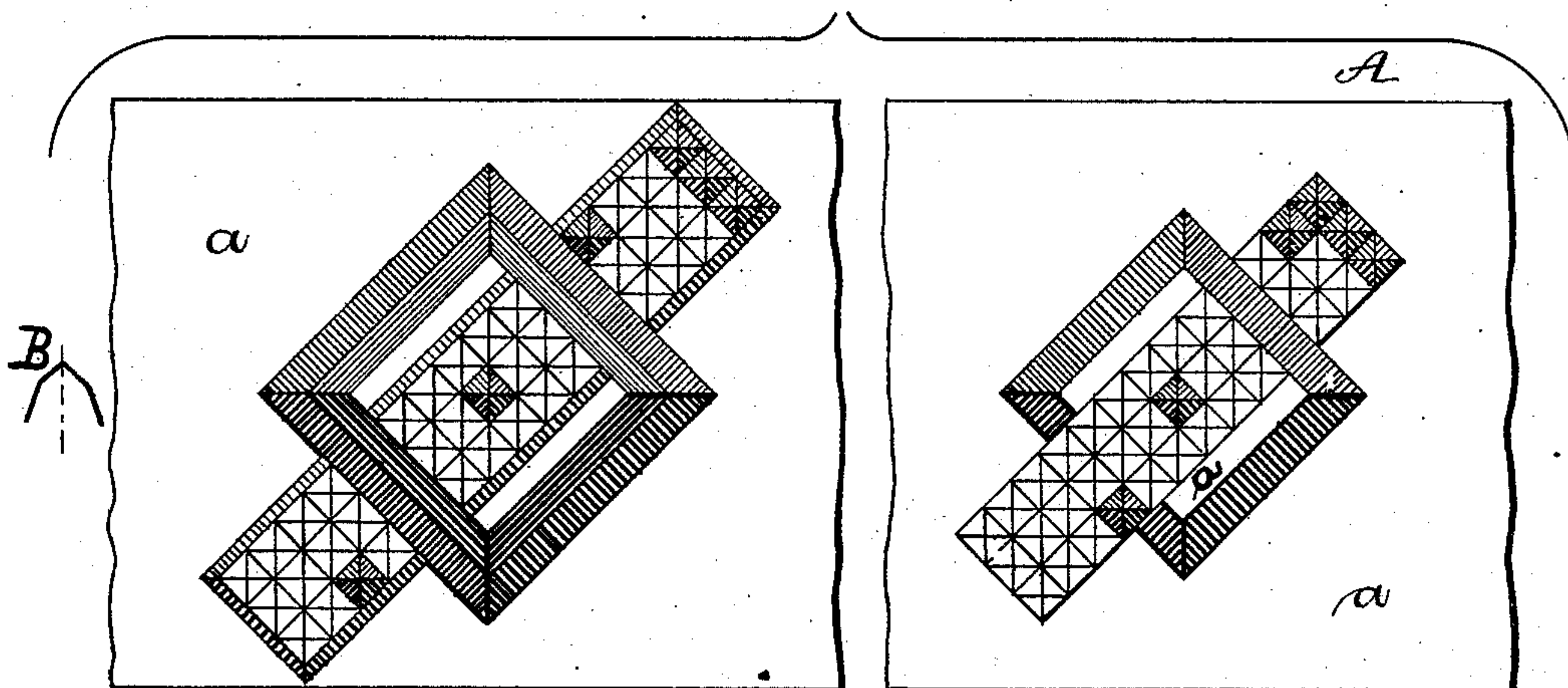
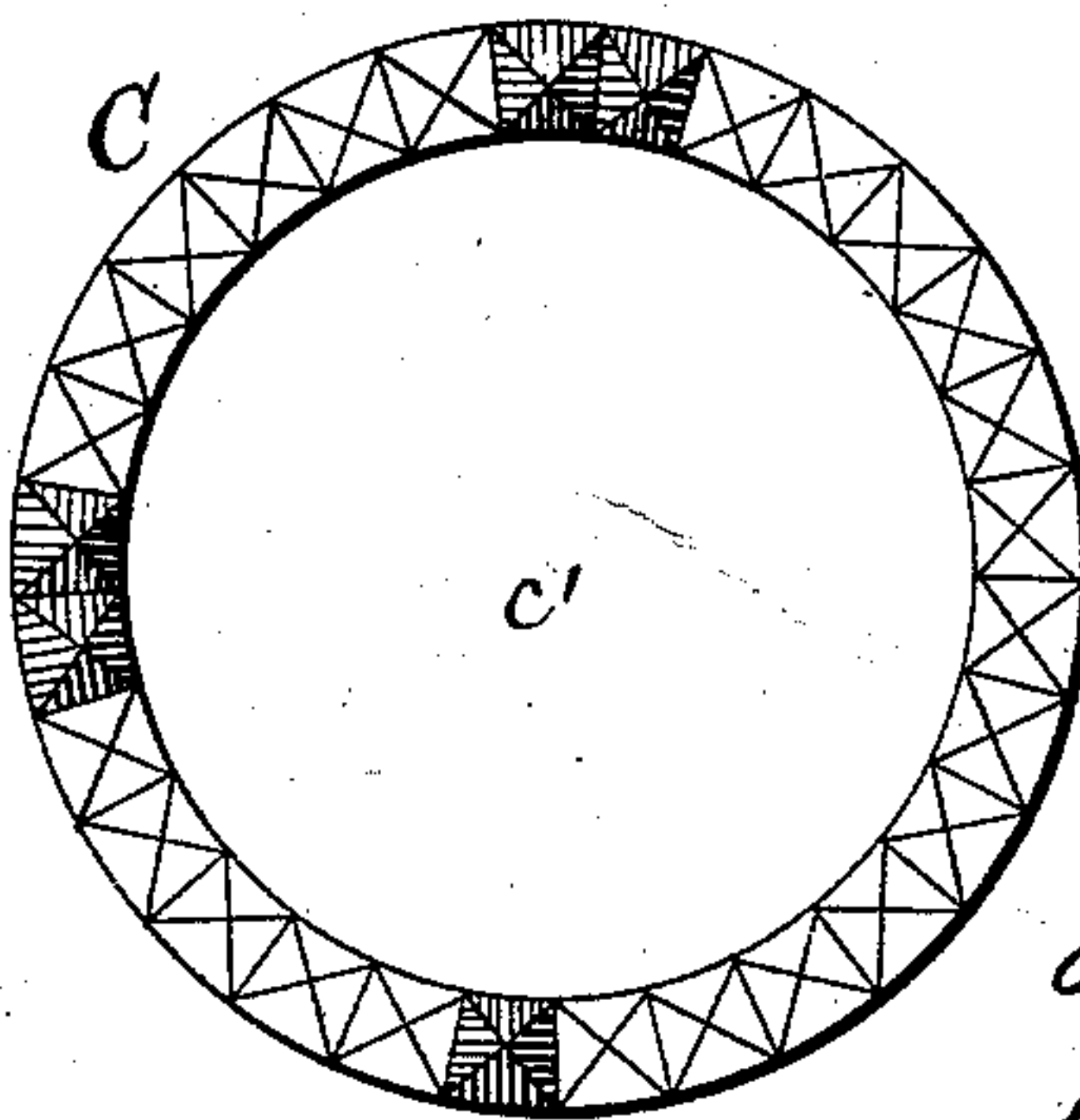


Fig. 4.



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METHOD OF ORNAMENTING METAL PLATES FOR JEWELRY.

SPECIFICATION forming part of Letters Patent No. 302,036, dated July 15, 1884.

Application filed May 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES ROTHSCHILD, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Metal Ornamentation, of which the following is a specification.

My invention relates to a method and means for ornamenting metal plates for jewelry stock and for the finished production as a new article of manufacture.

The object of my invention is to produce ornamented jewelry of a new and beautiful description, having raised sectional divisions peculiar in character, the central point of each sectional division being higher than any other portion thereof, and the oblique or inclined sides of each of which divisions being indented in simulation of engraved lines, said lines of each sectional division extending upward from the base. By this means I produce an ornamental metal plate having a series of embossed figures, the polygonal sides of which present divers and diverse angles, which reflect and refract light at various incidences, the effect being to give to said metal and to articles of jewelry made therefrom the appearance of a series of gem-settings prismatic in character. This effect is heightened and increased when the plate surface is multicolored. According to the present fashion, there is a great demand in the manufacture of jewelry for stock-plate that has a party-colored or embossed surface, or both combined. The party-coloring is produced by a variety of treatments, not herein necessary to describe, as my invention can be applied to any description of multicolored plate the surface of which is normally smooth and unbroken, or to a plate with a single surface color. Therefore I will observe that I do not in practice confine myself to plates either of a single-color or of party-color surface, the main object and purpose of my invention and the gist thereof being to upraise certain sectionally-divided portions of metal plates and to ornament in simulation of engraved lines the sides of each raised section, as and for the purpose herein described, and specifically pointed out in the claims.

Referring to the accompanying drawings, in which similar letters of reference indicate like

parts on each figure, Figure 1 represents a metal plate ornamented according to my invention. Figs. 2 and 3 are like views showing parts of the plate left plain. Fig. 4 represents the bezel of a locket or brooch embodying my invention.

A is a metal plate; *a*, the plain surface thereof; *a'*, raised sectional divisions thereof; *a''*, lines on the raised sides of the divisional sections. When the figure is a cone or of any shape in which the base does not present angular sides, it will be necessary to arbitrarily divide the line of the base into sections, on each of which lines parallel and extending upward from the base-line are to be placed, the parallel lines in each section to be in a different direction from those in the adjoining sections. Each, all, or any of the raised sectional divisions may be so composed as to consist of more than a single elevation, so that on any of such elevated sectional divisions one or more additional elevations may be superimposed in succession, each upper one being smaller in diameter than the one from which it springs. In such case each of said successive elevations must have its sides indented or impressed in imitation of engraved lines. This form is plainly illustrated on Fig. 3 at B. It is not necessary that the whole plane of the metal plate shall be covered with the desired ornamentation. Parts thereof may be left smooth and plain, as illustrated in Figs. 2 and 3. This plain surface may be further ornamented in a variety of ways—as, for instance, etching, chasing, engraving—and will provide a space for placing initials, mottoes, monograms, or the like thereon—as, for instance, if the bezel C, Fig. 4, were stamped or embossed up and the central portion, *c'*, to consist of a plain plate. So, too, may such plain surface be enameled or colored, in whole or in part, as taste or convenience may dictate. It will thus be seen that I provide for an indefinite variety of ornamentation by my improvement and by combination with other well-known devices.

The process by means of which I produce the ornamented plates, as hereinbefore described, is as follows: I prepare a pair of rollers of the usual character with male and female dies, the main pattern to be produced being in projection on the male die-roller, the female die-roller being provided with cor-

responding depressions; but in addition there-
to, upon the sides of each depression upon the
female die, are a series of indented lines ex-
tending from the base of each side, and as the
5 metal passes between the rollers the divisional
sections are not only forced up or embossed
by means of the male die, but the opposite
side surface of each projection is imprinted by
the said lineal indentations in exact imitation
10 of line engraving. Of course, instead of using
die-faced rollers, the sectional divisions, orna-
mented as described, may be formed on the
metal by striking it up between male and fe-
male hubs or dies.

15 Having now fully described my invention,
what I claim as new, and desire to secure by
Letters Patent, is—

1. The within-described method of produc-
ing ornamental metal work of the character
20 specified, which consists of the following steps:
first, preparing a male die with divisional
sectional projections, the central point of each
of said projections being higher than any other
portion thereof, then preparing a female die
25 with depressions coincident with the projec-
tions of the male die, then engraving or other-
wise indenting upon the sides of each depres-
sion of the female die lines extending upward
from the base of such depression, then placing
30 a metal plate between the male and female die,
and then subjecting said plate to pressure, as
and for the purpose intended, substantially as
described.

35 2. As a new article of manufacture, an or-
namental plate for jewelry-stock, having upon
its surface a series of divisional sectional pro-

jections, each of which projections being high-
est at its central point, in combination with
lineal indentations upon the sides of each pro-
jection extending from the base upward, as 40
and for the purpose intended, substantially as
described.

3. As a new article of manufacture, an arti-
cle of jewelry having an ornamental surface
composed of a series of divisional sections, the 45
center of each of said sections being the more
elevated point thereof, the deflecting side of
each of said sectional elevations being sup-
plied with lineal impressions extending from
the base upward, substantially as described. 50

4. As a new article of manufacture, a plate
for jewelry-stock, having portions of the sur-
face thereof smooth and plain and other por-
tions provided with sectional divisional pro-
jections, the center of each of said projections 55
being higher than any other portion thereof,
the deflecting sides of each projection being
supplied with lineal impressions extending
from the base upward, substantially as de-
scribed. 60

5. The combination, with the partly-colored
surface of a metal plate for jeweler's stock, of
divisional sectional elevations having their
highest point at their centers, and their de-
flected sides provided with impressions ex- 65
tending in right lines upward from their bases,
substantially as described.

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