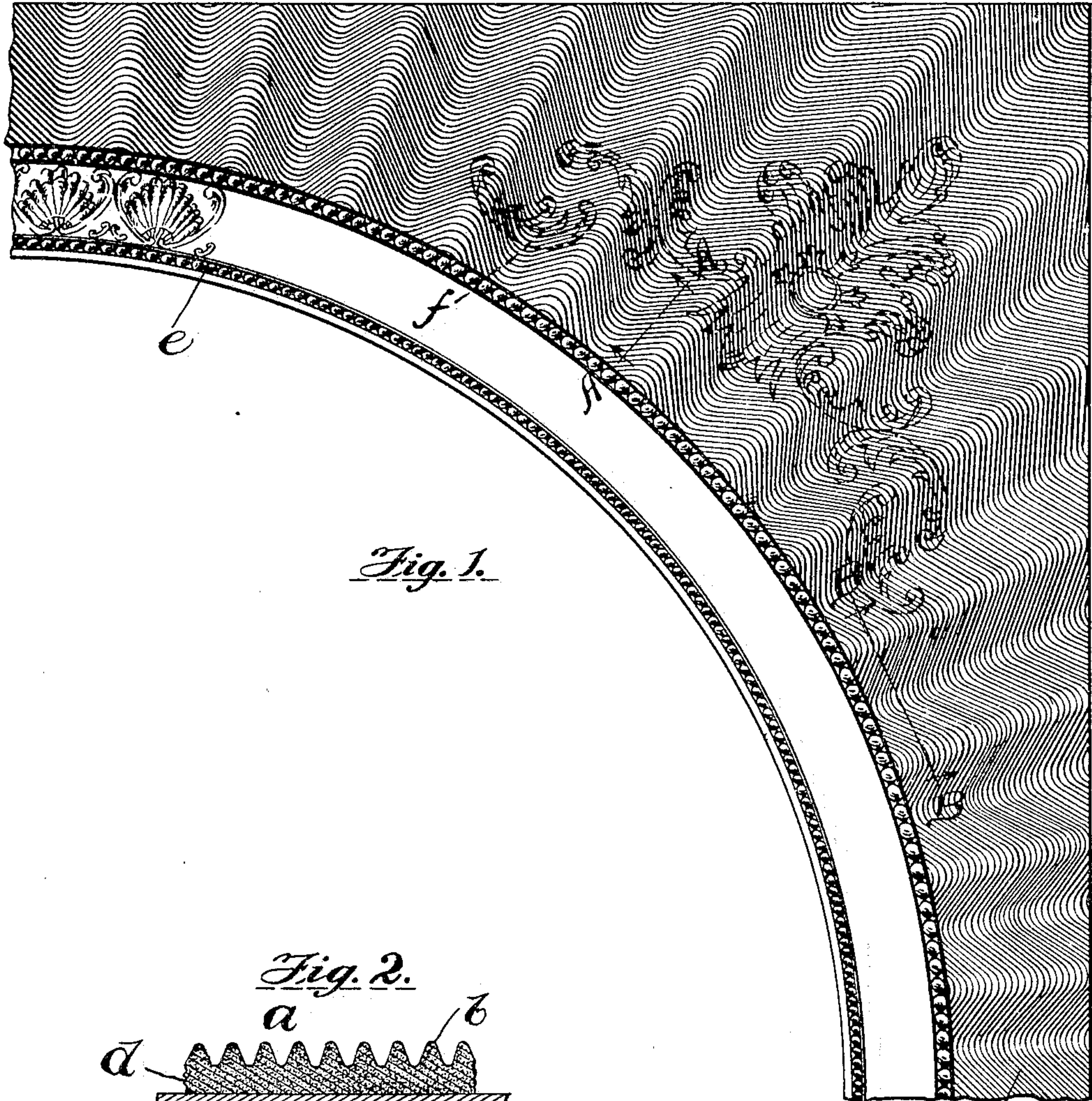


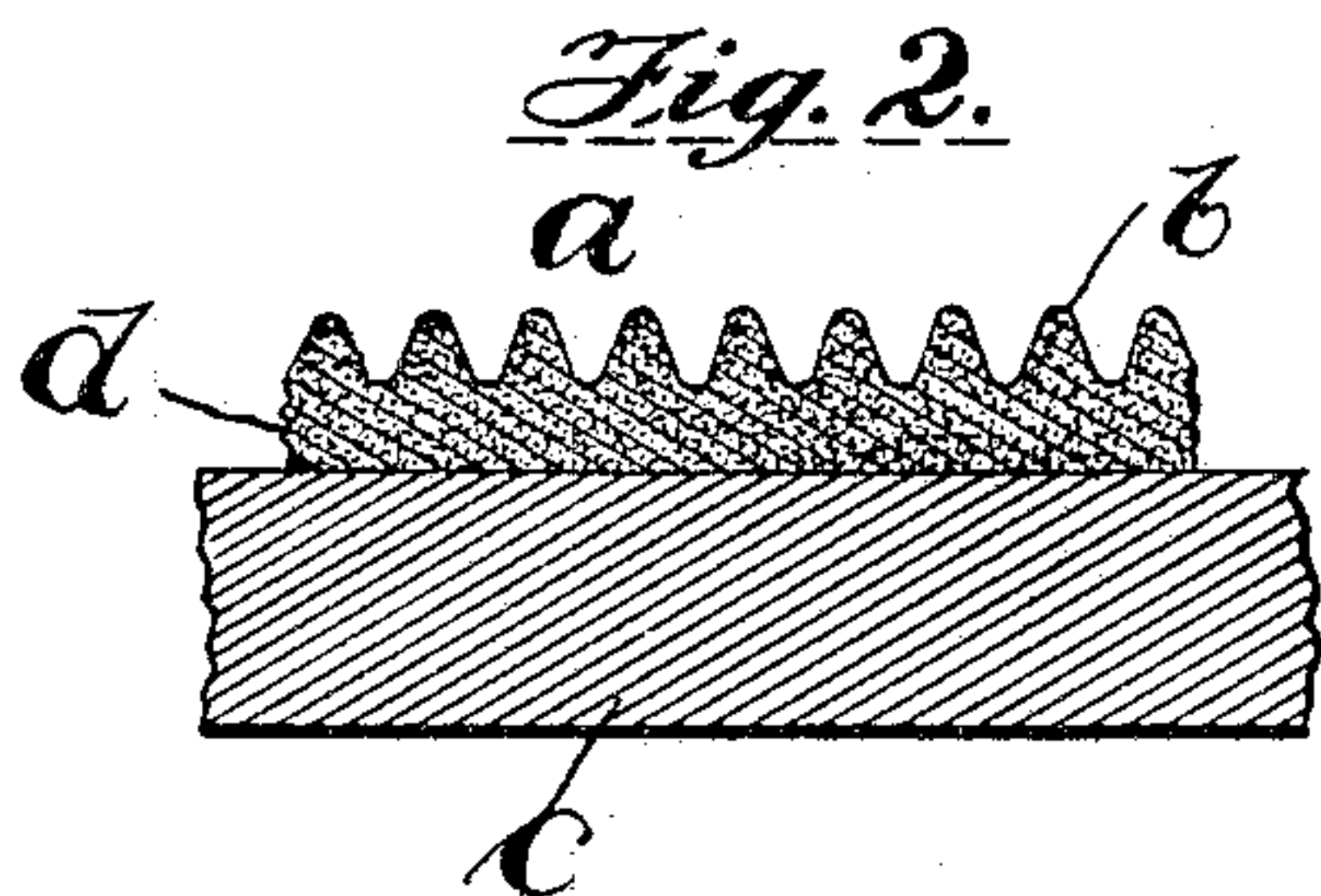
No. 782,177.

PATENTED FEB. 7, 1905.

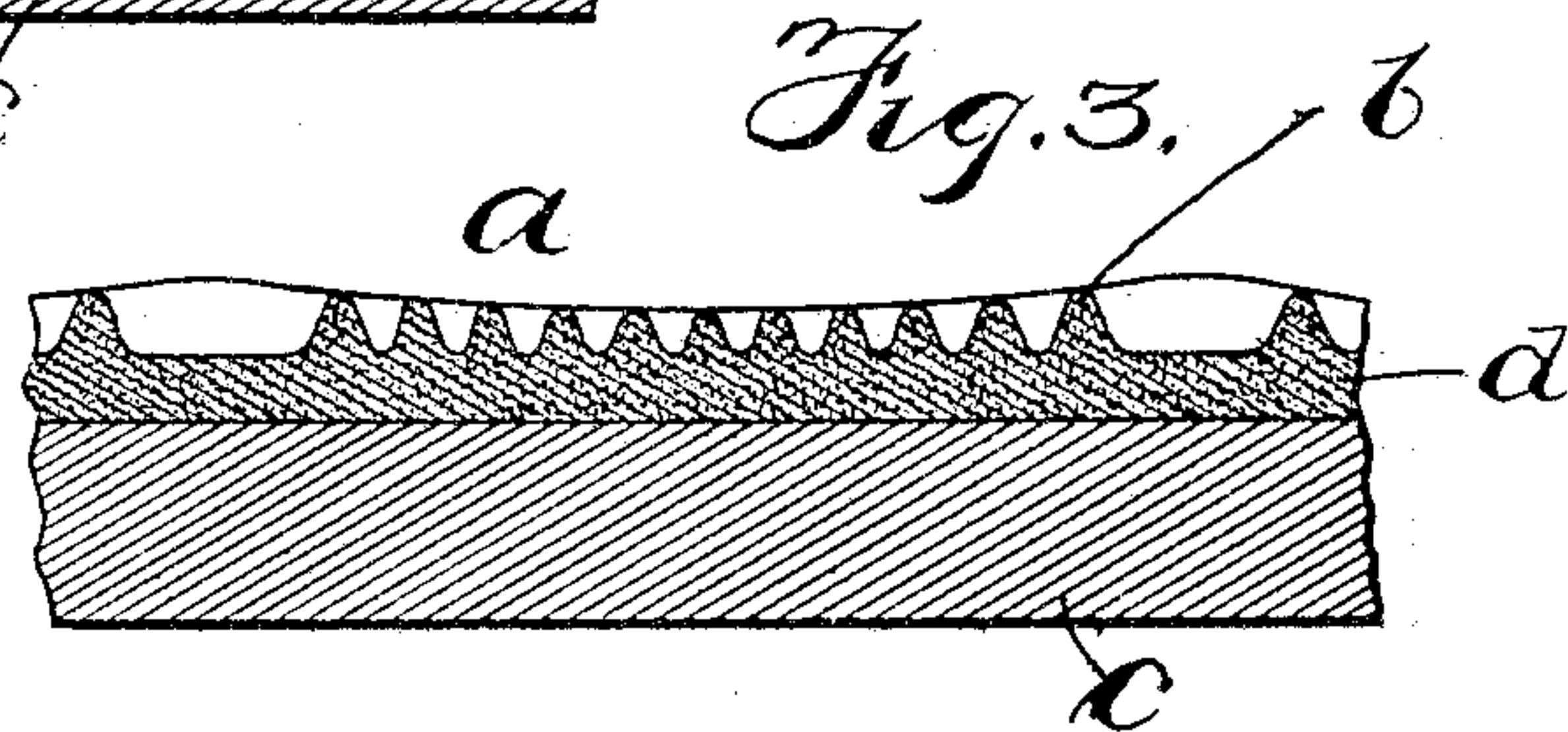
C. E. SANDSTROM.  
ORNAMENTAL SURFACE.  
APPLICATION FILED SEPT. 6, 1904.



*Fig. 1.*



*Fig. 2.*



*Fig. 3.*

Witnesses:

*W. A. Perry*  
*J. B. Weir*

Inventor:

*Charles E. Sandstrom,*  
*by John Howard McChoy*  
*his atty.*



# UNITED STATES PATENT OFFICE.

CHARLES E. SANDSTROM, OF CHICAGO, ILLINOIS.

## ORNAMENTAL SURFACE.

SPECIFICATION forming part of Letters Patent No. 782,177, dated February 7, 1905.

Application filed September 6, 1904. Serial No. 223,454.

*To all whom it may concern:*

Be it known that I, CHARLES E. SANDSTROM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Ornamental Surfaces, of which the following is a specification.

My invention is concerned with a novel formation of a surface for panels, mats, picture-frames, and ornamental surfaces in general whereby by the effect of the shadows on some parts of the surface is produced an appearance similar to that of rays of light radiating from a central point or foci.

To illustrate my invention in one form, I annex hereto a sheet of drawings, in which the same reference characters are used to designate identical parts in the figures, of which—

Figure 1 is a plan view of a portion of a picture-frame having the ornamental surface constituting my invention applied thereto. Fig. 2 is an enlarged section on the line A A of Fig. 1, and Fig. 3 is a similar view in section on the line B B of Fig. 1.

In carrying out my invention it will be seen that I form on the surface *a* a series of substantially parallel ridges *b*, each ridge being in the form of uniform and symmetrical undulations or serrations and the undulations of each ridge from the center being just enough larger than those of the one within it to cause the undulations to appear to be nested, as it were, and to have their crests and hollows in straight radial lines from the center. It results from this conformation of the surface that when looked at from any certain position the segmental surface included between radial line through the crests and an adjacent radial line through the adjacent hollows will on one side of the crest-line appear lighter than the adjacent segmental surface on the other side of the crest-line. This alternating appearance of light and dark segments produces the effect of rays of light, as it were, radiating from a common center or from common foci where the frame or panel is of an oblong shape, necessitating a generally elliptical outline to each ridge.

In illustrating my invention on paper it will

be apparent that it is impossible to produce the effect of the light and shade varying on the different sides of the crests, so that I have illustrated it as it appears when the light falls from one quarter, and it will be apparent that if it fell from another quarter the darker portions would be on the other side of the crest-line. To reinforce this effect, I prefer to reduce the height of the ridges slightly in the hollows from what it is in the center, as seen in Fig. 3, and this emphasizes the light and shade effect, especially where the light falls on the surface at a considerable angle.

In the drawings the surface *a* is illustrated as formed on the wooden base *c* of the picture-frame by means of a layer *d* of putty, which is spread thereon and rolled in the customary manner in the design shown. To the ornamental surface *a*, forming the body of the frame, may be added, if desired, a border *e*, similarly formed, and the ornamental surface *a* may further be decorated by any desired design in relief, as indicated by the dotted lines at *f*.

Of course it will be understood that I do not confine my improved surface to one formed of putty or other composition, as it may be molded, cast, stamped, engraved, or formed in any manner upon any material.

What I claim as new, and desire to secure by Letters Patent of the United States, is the following:

1. An ornamental surface having formed thereon the substantially parallel undulating ridges having their general direction in a curved line, and having their undulations with their crests and hollows located at different radial distances from the center of curvature and of a depth sufficient to produce the effect of alternating light and dark segments radiating from a common center or focus.

2. An ornamental surface having formed thereon the substantially parallel undulating ridges having their general direction in a curved line, and having their undulations with their crests and hollows located at different radial distances from the center of curvature and of a depth sufficient to produce the effect of alternating light and dark segments, the

ridges having slightly-different altitudes at the crests of the undulations from those at the hollows.

- 5 3. An ornamental surface having formed thereon in putty substantially parallel undulating ridges having their general direction in a curved line, and having their undulations with their crests and hollows located at different radial distances from the center of curva-

ture and of a depth sufficient to produce the effect of alternating light and dark segments radiating from a common center or focus.

In witness whereof I have hereunto set my hand this 3d day of September, 1904.

CHARLES E. SANDSTROM.

Witnesses:

JOHN H. McELROY,

G. Y. DOUKWARD.