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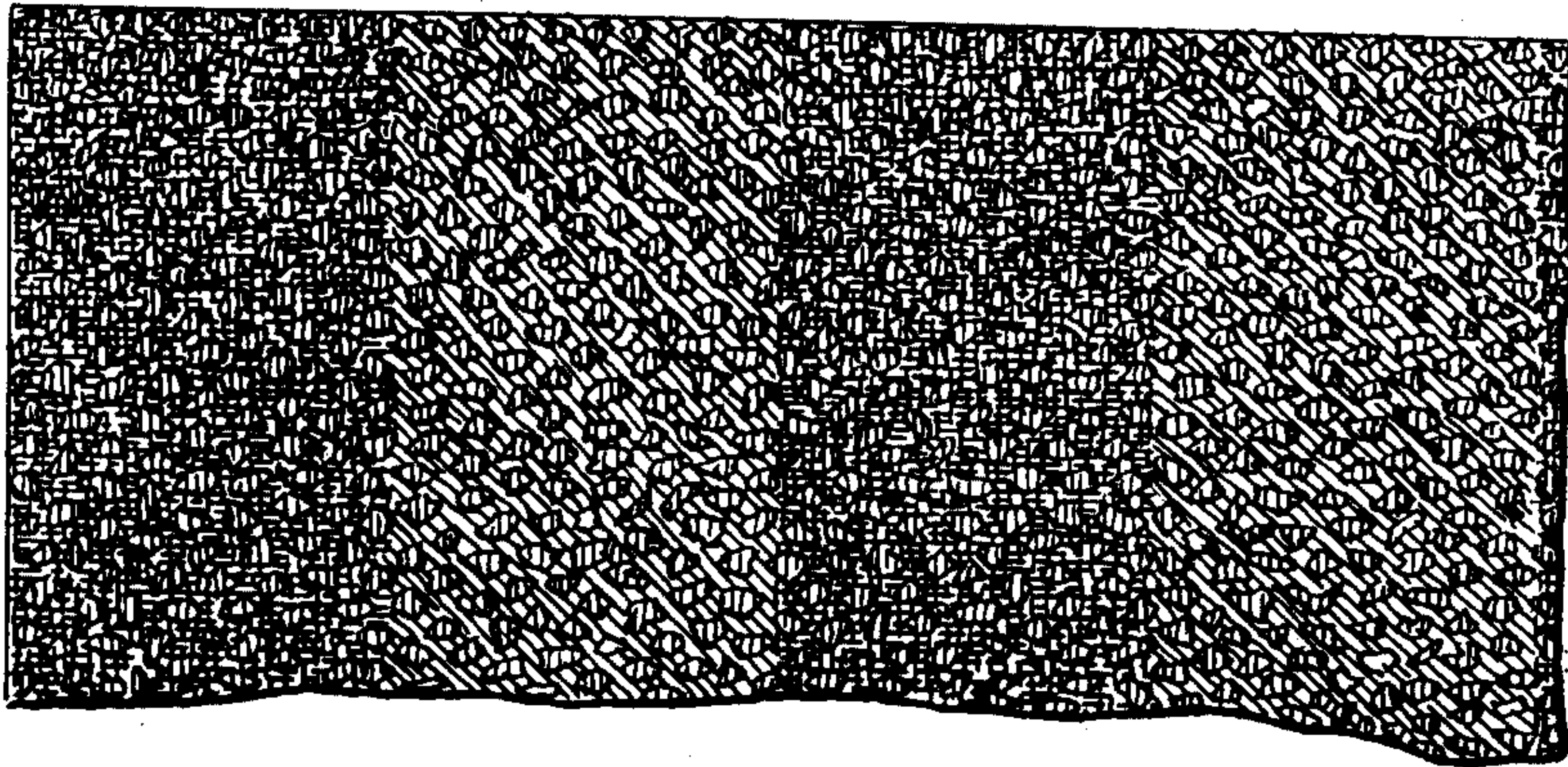
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1,623,189

WATERPROOF PRODUCT

Original Filed Dec. 18, 1920

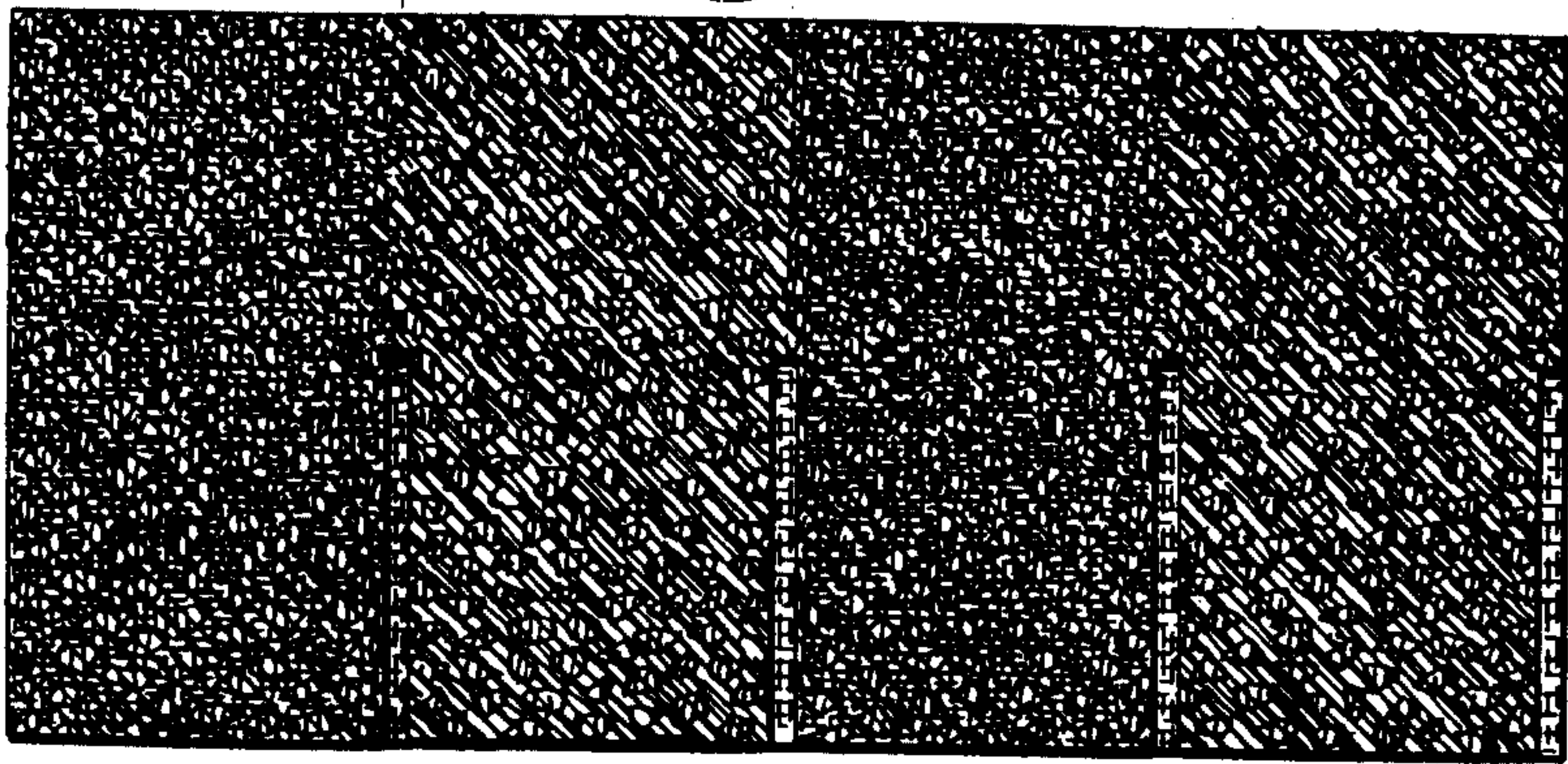
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



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# UNITED STATES PATENT OFFICE.

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## WATERPROOF PRODUCT.

Application filed December 18, 1920, Serial No. 431,744. Renewed March 18, 1925.

This invention relates to improvements in waterproof products and process of making same, and is an improvement on an original application, No. 339,210, heretofore filed jointly by Chester E. Rahr and the said Lester Kirschbraun.

The present invention is more particularly directed to ornamental covering such as wall boards, floor coverings, roofings and exterior finishes.

The object of the present invention is to produce a product from ordinary ready-made granular surface roofing or the like, in which the granular surfacing while more or less exposed is nevertheless so ornamented as to provide symmetrical designs to the finished product. In its more specific aspects, the invention may be for example used to produce that type of roofing known commercially as strip shingles.

Fig. 1 is a face view of a portion of the sheet formed by the process herein disclosed. Fig. 2 is a sectional view taken through the product shown in Fig. 1. Fig. 3 is a face view of a strip shingle formed with this type of product.

In the present invention, the upper edges of the mineral surfacing should preferably be exposed by the removal of the portions of the waterproof binder which, as stated, is applied in symmetrical designs to such granular surface. Where the product is used as a floor covering, it is desirable that the interstices between the mineral surfacing be completely filled with the waterproof adhesive material, and, if desired, the upper surface may be then ground down so as to produce a smooth surface to walk on and obtain a more attractive finish. Moreover, such a product will not accumulate in wear detritus or foreign matter.

The process of our invention may be carried out as follows:

We may first make an emulsion of a pitchy binder as for example stearine pitch, the residue of wax tailings produced from the distillation of petroleum, wax tailings with superheated steam or drying oils as for example linseed oil hardened with various gums or resins. We then make a paste or suspension of water and an emulsifying agent, as for example, colloidal clay, and to this is gradually added preferably in heated liquid condition the pitchy binder. This forms an emulsion which can be thinned

with water, and in which the binder is in the internal phase and the water in the external phase. To this may, if desired, be added a pigment or dye soluble in the binder of a predetermined color and in quantity sufficient to give a distinct color to the binder.

An invention may be carried out of this general character in which the binder may be rubber or a rubber composition or rubber substitutes.

One emulsion of the character above described may be made in which the wax tailings, for example, may be colored green so as to produce in effect a green emulsified matrix.

Another emulsion is then made in exactly the same way, except that the binder may be buff color.

The two emulsified matrices may then be applied to the granular surfacing of ordinary ready-made roofing, the latter consisting, for example, of an asphalt saturated felt, an asphalt coating to which is supplied a granular facing of say red slate. To this granular surfacing may be applied in alternate stripes, or in any symmetrically arranged designs, the green and buff colored matrices. The result will be, for example, to produce alternate green and buff colored stripes extending lengthwise of the ordinary roofing sheet and completely filling the interstices between the granular particles thereof. The uppermost part of the emulsion so applied may be wiped or ground off or otherwise removed so as to expose the top surfaces of the granular facing. The water may then be dried out and the matrix allowed to set.

An invention may be carried out in which instead of producing the designs by means of an emulsion, any suitable waterproof paints, as for example, a green waterproof paint and a buff colored waterproof paint, having a linseed oil base may be used.

If desired, the finished sheet made in the manner above described may be severed transversely at intervals so as to form shingle strips similar in size and shape to the well-known shingle strips of commerce. In the event that it is desired to form these shingle strips, it will probably be desirable, for example, to have the green stripes say about 10 inches wide, alternated with a buff colored strip about a half an inch wide.

This will simulate the cutout of the well-known shingle strip of commerce without weakening the sheet and preventing the curling of the edges sometimes resulting from  
5 such cutouts.

We have used green and buff colors as merely illustrative, it being understood that waterproof binders of any desired colors  
may be used.

10 We claim as our invention:

A strip shingle consisting of a fibrous base and an adhesive coating and a granular

surfacing, a waterproof matrix of predetermined color filling the interstices and the granular surfacing in spaced areas of a design to simulate shingles, and a waterproof  
15 matrix of a different color than the first, likewise filling such interstices between the granular particles but in relatively narrow lines separating the designs formed by the  
20 first matrix.

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