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after December 10 address will  
be:

Peabody Museum  
Yale University  
New Haven, Connecticut

November 21, 1962

Dr H. B. Stenzel  
3726 Colquitt Street  
Houston 6, Texas

Dear Dr. Stenzel:

I was glad to have had the opportunity of talking with you at the GSA meetings in Houston. In our conversation you mentioned that Keen refers to an oyster with a metallic luster. The species she mentions is O. iridescans Hanley from the Panamic Province. We have three shells in our collection. The inner irridescant layer (Fig. 1) is irridescant but in microstructure details it is not nacreous. The structure is foliated in the sense of Bøggild, 1930. Thin sheets (Figs. 2, 3) crop out on the inner surface of the shell at a low angle (four to five degrees). In nacre the sheets are deposited one at a time over the whole growth surface and parallel to that surface (Gregoire, 1959). Each one-micron thin sheet of the foliated layer is made up of blades (Figs. 2, 4) oriented normal to the outcrop pattern of the sheets on the inner surface of the shell. In nacreous structure each sheet is made up of more or less regular polygons (Fig. 5). According to Bøggild (1930) the foliated structure is calcitic while the nacreous structure is aragonitic.

If there is more information you would like to have, or if you would like a small fragment from this layer, please let me know.

Sincerely yours,

*Copeland MacClintock*

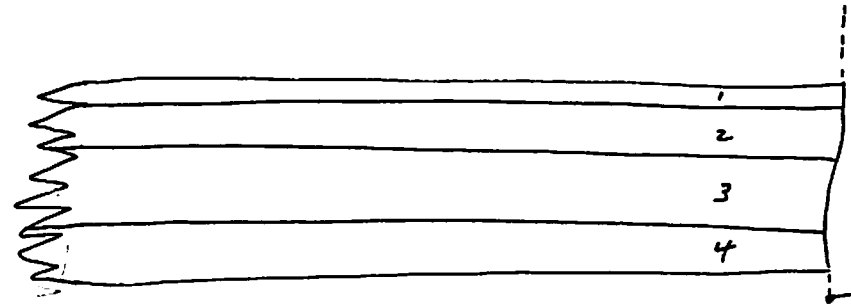
Copeland MacClintock

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O. iridescens. ~~H. iridescens~~

view looking down on <sup>part of a</sup> single <sup>isolated</sup> sheet of the foliated structure; showing 4 blades

Fig. 4

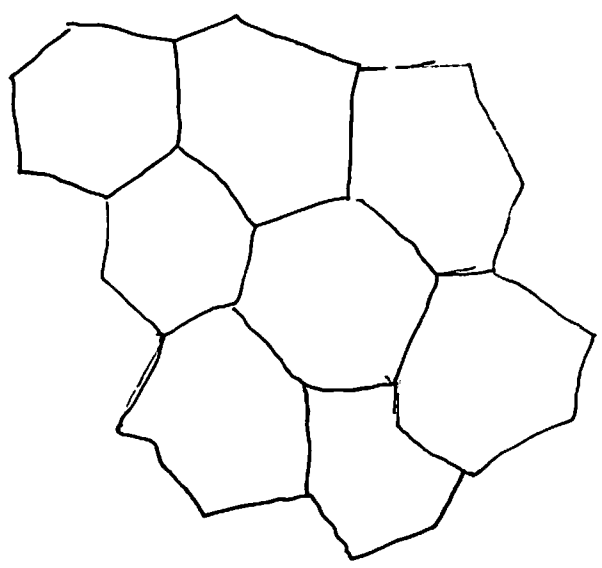


20 microns.

line of outcrop of sheet on inner shell surface.

view looking down on part of a single isolated sheet of nacre; showing 8 polygons (see Grégoire, 1959)

Fig. 5



5 microns

100 SHEETS 42-382  
50 SHEETS 42-381

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Ostrea iridescens Hanley

Recent: intertidal, Pacific O.; Costa Rica

Fig. 1

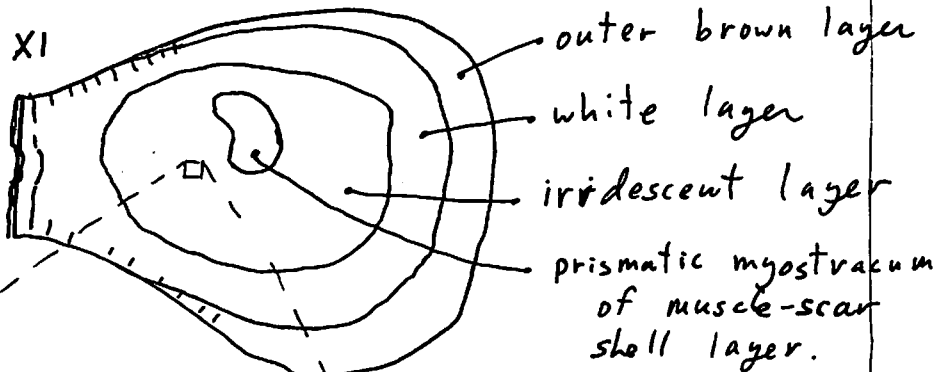


Fig. 2

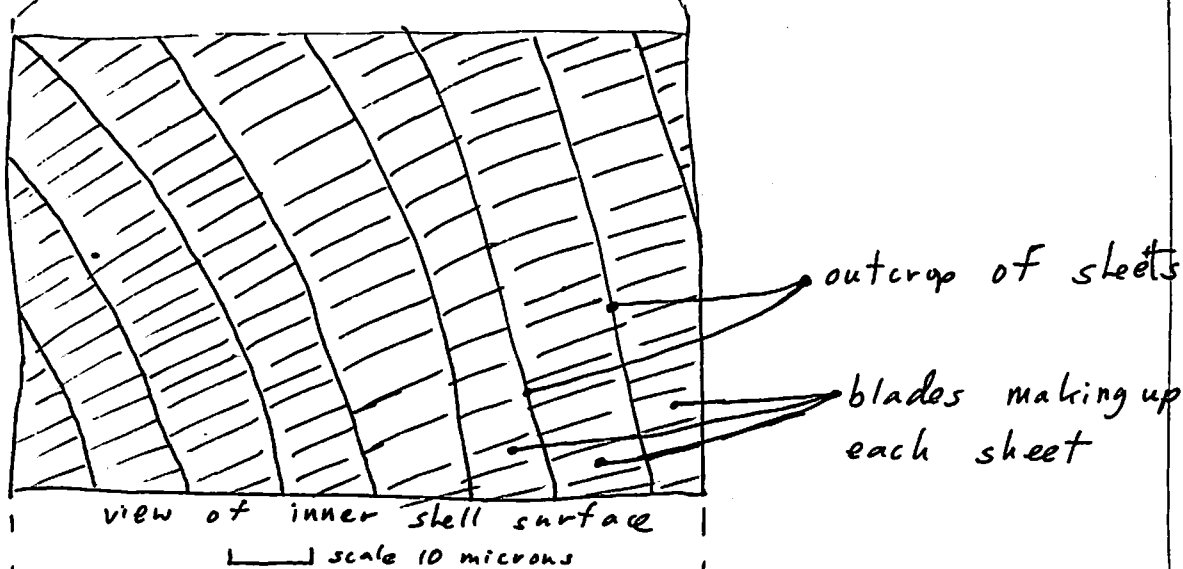
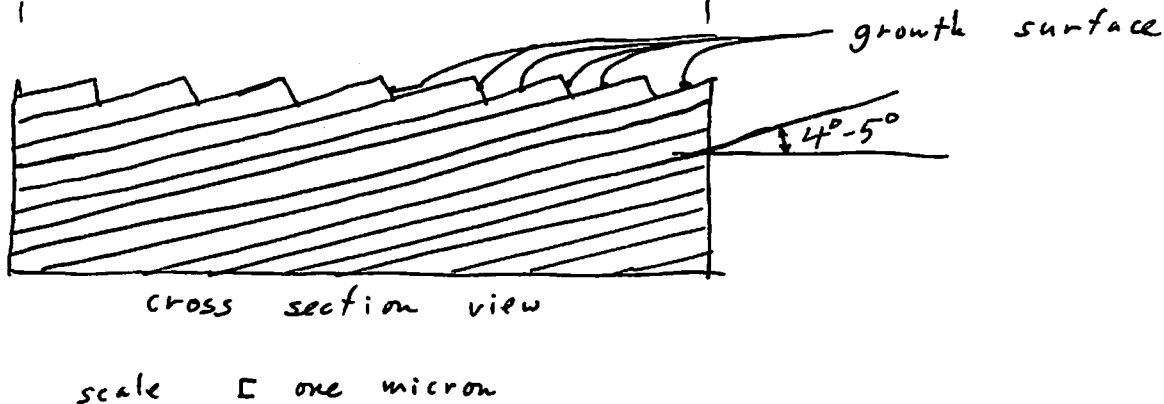


Fig. 3



100 SHEETS 42-382  
50 SHEETS 42-381