

Ru7004

Box 30

F.8

Taconic

~~M.C.~~ Limestones

~~10-12-80~~

The condition of the limestones in the dark shales & purple & green slates leads <sup>only</sup> to the conclusion that <sup>in</sup> many instances they are a conglomerate derived from a preexisting formation but as we find ~~interbedded~~ limestone in layers in the slate & without doubt ~~is~~ deposited contemporaneously with it & the conglomeratic thecciated l- containing the same fauna as the bedded layers we must look for some other explanation for the conglomerate limestone. A study of numerous localities suggests two modes of origin -

1st. The formation of  
small irregular  
masses of limestone from  
two millimetres in diameter to  
~~the size of a potato~~  
~~two feet~~ in diameter  
a metre ~~or more~~ <sup>600 metres</sup> ~~feet~~ thick  
& several miles in area  
as in Georgia Vermont  
The masses appear to be  
~~formed~~ <sup>formed</sup> ~~from~~ <sup>formed</sup> ~~the~~ <sup>formed</sup> ~~aggregation~~ <sup>formed</sup> ~~of~~ <sup>formed</sup> ~~calcareous~~ <sup>formed</sup>  
matter on the sea bed  
& usually numerous  
fossils occur in ~~them~~ <sup>the</sup>  
larger ones.

2d) By the formation of  
calcareous layers on the  
sea bed & their heaving  
up after partial  
consolidation & induration  
by the pressure of the  
accumulating sedi-  
ments above & the  
~~soft~~ yielding nature of  
Bull. U.S. Geol. Surv. p.

the clays beneath.

In many instances the rock looks like a great pudding stone - the fractured pieces of limestone having been broken & pressed in all directions thro' the plastic clays. By the same pressure the concretionary masses were crowded irregularly thro' the clay & matrix.

The general character of the conglomeration does not appear to be that of the accumulation on a sea beach - tho' in places it is difficult to say whether we are looking at a conglomeration or a rock broken & mixed in

~~and~~ plastic matting  
by pressure +

10-13-86  
Rock Hill

At the ~~State~~ School  
House in north part  
of Greenwich both  
bedded & congl. l-  
contains ~~mic~~ <sup>Tacomic</sup> fossils.

~~H. micans~~

~~Q. asaphoides~~

~~This is a fine locality to collect at.~~

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This & the East Hebron  
locality are fine illustrations  
of the bedded l- carrying  
~~M. C. fauna~~ <sup>Tacomic</sup> fossils.

May 4, 1988

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May 4/88-

Atlantic Coast Cambrian.

With Prof. N. S. Shaler & Mr. Foerste examined Cambrian rocks in Attleborough, Mass.

The <sup>green + purple</sup> redish-silicious & arenaceous shales carrying many calcareous layers with fossils are much like the Middle Cambrian shales beneath the Berlin Conglomerate of Rensselaer Co. N.Y. The fauna however is more like that of the western limit of the Cambrian in Rensselaer & Washington Cos. N.Y. The presence

of a True Paradoxides <sup>2</sup>  
in association with  
the Middle Cambrian  
fauna is also of the  
lower horizon of  
New York is very  
significant as it  
points to Paradoxides  
as older than the  
True Alveolus.

Prof. Shaler's discovery  
is a very important  
one ~~in~~ ~~the~~ ~~presence~~ ~~of~~ the  
~~presence~~ presence of the  
Alveolus fauna on the  
eastern side of the  
Green Mts & their south-  
ward extension into  
Connecticut.

Geologically it frames  
the age of a large  
area of hitherto  
undetermined rocks in  
Eastern Massachusetts.

The fauna is like that of the Alenellus horizon in the presence of Abolella crassa -

Hyalites communis -  
" Americana -

Microdiscus -

Stenotheca allied to S. rugosa - (Coarsely ~~sub~~annulated variety) -

In the presence of Paradoxides & the absence of Alenellus it is ~~termed~~ drawn towards the Paradoxides fauna & the type of Ptychoparia is also more that of the lower horizon -

a whole it is, with my present idea of the <sup>vertical</sup> distribution of the Cambrian fauna, she referred to the base

of this Middle Cambrian <sup>4</sup>  
fauna -