

cidence with them. This fact can be explained only by supposing that the accumulation of sand around the prostrate fronds often did not flatten them down, because so rigid.

3. The stems below the fronds, from half an inch to four or five inches across, are common at the new locality; and though no specimens have been found connected with the fronds, no other plant occurs there, and it is reasonable to suppose the two once united.

4. In some instances these stems proceed from a common base in directions more or less radiated; showing that several of them grew from the same root.

5. The scalloped or perhaps toothed margin of the fronds.

6. Fructification. A few fronds have been found with dots upon them resembling those on the polypodium.

6. UPON A DIATOMACEOUS EARTH FROM NOTTINGHAM, CALVERT CO., MARYLAND. By CHRISTOPHER JOHNSTON, M. D., Baltimore, Maryland.

P. T. TYSON, Esq., of Baltimore, very kindly sent me for examination a specimen of "Tripoli" from Nottingham, that proves to be an extremely rich diatomaceous earth, containing forms which, if they do not demonstrate its identity with the celebrated Bermuda Tripoli, are sufficient to establish its very close resemblance to the latter, as well as the relationship which many diatomists have recognized as existing between the Bermuda Tripoli and the well-known Richmond Earth. Indeed, I feel assured that the Nottingham is the equivalent, at the least, of the Bermuda Tripoli; and that both, if these be *two*, are derived from the same deposit, which doubtless merges south-westward into the Virginia bed. It may not be amiss to state, in this place, that last summer I visited Bermuda-Hundreds, on the James River near City Point, for the express purpose of finding, if it there existed, the famous Tripoli which bears its name; but my efforts were entirely fruitless.

In the Nottingham Earth the genus *Heliopelta* is numerously represented; and this genus, together with the species *Craspedodiscus elegans*, is characteristic of the Bermuda, or, at least, have not been found in any

other deposit as far as I am informed. The Nottingham Earth also contains *Aulacodiscus Crux*, the importance of which is less considerable than the preceding; and other forms, as *Actinoptychus*, *Goniothecium*, *Gallionella*, *Actinocyclus*, *Pyxidicula*, etc., which are by no means peculiar to the Bermuda, but are met with elsewhere, especially in the Richmond earth.

It gives me great pleasure to offer the corroborative opinions of two gentlemen of much distinction as Scientists.

Arthur M. Edwards, Esq., writes me as follows: "Your note of the 14th May, with the enclosed specimens, came duly to hand. The Nottingham Earth is an important discovery, and it corroborates my supposition that the celebrated Bermuda Tripoli came from the same deposit. Your earth is very near the Bermuda."

Through the kind offices of Dr. S. Durkee of Boston, I am in possession of the subjoined highly valuable letter from Charles Stodder, Esq., of the same city, and cabinet keeper of the Boston Natural History Society.

Boston, 20th May, 1860.

"DEAR SIR:—I find in the Nottingham Earth from Dr. Johnston the following genera and species:—

Coscinodiscus *Oculus Iridis*.
 " *Apiculatus*.*
 " *Lineatus*.
 " *Marginatus*?*
Actinoptychus *Velatus*.*
 " *Senarius*.*
 " *Dives*.
Actinocyclus, a great variety.
Heliopelta *Eulerii*.*
 " *Leuwenhoekii*.*
 " *Metii*.*
 " *Sellignerii*.*
Craspedodiscus *Elegans*.*
 " *Coscinodiscus*.
Eupodiscus *Rogersii*.*
Orthosira *Marina* (W. S.).
Seproneis *Caduceus*.*
Triceratium *Reticulatum*.*
 " *Pileolus*.
 " *Acutum*.*
 " *Obtusum*.*
 " *Condecorum*.*
 " *Solenoceros*.
Goniothecium *Odontella*.*
 " *Rogersii*.*
Mastogonia *Oculus chameleonitis*.*
 " *Actinoptychus*.

Pyxidicula *Cruciata** and other species.
Pleurosigma.
Systhania *Corona*.*
 " *Diadema*.*
Navicula *Didyma* (small).*
Omphalopelta *Cellulosa*.
Rinoselina.
Periptera, like Bailey's unnamed fig. 15.
Raphoneis.*

Not Diatomes.

Dictyocha *Quadratum*.*
 " *Ponticulum*.

Polycystina.

Halycaliptra *Virginica*.
Haliomma ——— ?
Encyrtidium ——— ?

Those marked with an asterisk were mentioned by Bailey in his original paper as having been found in "Bermuda Earth."

Mr. Stodder proceeds to say, "If these do not prove the earth to be identical with the Bermuda, it is more like it than any other I know of. A few of the species have not been found in the Bermuda to my knowledge; *Actinoptychus dives* is a very peculiar species, found by Ehrenberg in Aegina Earth, not in the Bermuda. *Craspedodiscus elegans*, I believe has never been discovered except in the Bermuda—the same remark applied to the whole of the genus *Heliopelta* until a few months since, when I found a specimen of *H. Leeuwenhoekii* in the Virginia Earth. The variety of *Coscinodisci* and *Actinocyclus* is very great, and will require much study to work them out."

Thus, it is highly probable that we have re-discovered the lost locality, since all evidence declares the striking similarity, if not identity, of the Nottingham earth of Maryland and the Bermuda Tripoli.

I am informed by Mr. Tyson that the bed, to which attention is called in this paper, varies from seven to thirty feet in thickness; and that the extent of the formation, as far as at present known, is about twelve miles from north to south, and seven miles from east to west. Mr. Tyson has not, as yet, been able to determine whether it belong to the upper Eocene or the lower Miocene.

7. DESCRIPTION OF A NEW TRILOBITE FROM THE POTSDAM SANDSTONE. By FRANK H. BRADLEY, of New Haven, Conn.; with a Note by E. BILLINGS, of Montreal, Canada.

Conocephalites minutus (n. sp.).

FIG. 1.

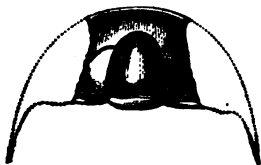


FIG. 2.



FIG. 3.



Fig. 1. The head magnified. The dotted lines represent the supposed outlines of the parts not preserved.

Fig. 2. The pygidium magnified.

Fig. 3. A detached cheek, magnified.

Cephalic shield apparently semi-circular, or nearly so; anterior