

which the German naturalist has fallen on the subject of the organization of the spores. M. Unger regards them as clothed with a ciliated membrane, similar to that which he was the first to observe on the spores of the *Vaucheria*. I am convinced, on the contrary, by repeated observations, that they are furnished with two long cilia inserted on the rostrum; an analogous arrangement to that which I have figured in the spores of the *Conferva glomerata* and *crispata**.

During the excursion which I made with M. Decaisne on the coasts of the British Channel, we had frequent opportunity of studying the spores of *Ectocarpus siliculosus*, of *Ulva lactuca*, and of *Enteromorpha compressa*. In the *Ectocarpus* we found two cilia inserted on a colourless rostrum. In *Ulva* and *Enteromorpha* the spores have four cilia. I found this same number in soft-water Algæ, the *Conferva zonata*, whose spores are similar to those of the *Chatophora* and *Draparnauldia*. They present a very visible red point, which I have even perceived sometimes on spores still enclosed in the tube of the plant. I may remark that the *Conferva zonata* is, moreover, a very distinct Alga from the true *Confervæ*. These latter appear to me to form a clearly limited genus, all the species of which have the tube finely striped with longitudinal striæ, for instance *Conferva glomerata*, *crispata*, *rupestris*, &c. These longitudinal striæ are themselves intersected by extremely fine transversal striæ, which appear to me to have hitherto escaped all microscopic observers.—*Ann. des Sci. Nat.*, Mai 1845.

On the Extinct Mammals of Australia, with Additional Observations on the genus Dinornis of New Zealand. By Prof. OWEN.

In a previous report Prof. Owen had demonstrated the former existence in Australia of two genera of Marsupial animals, rivalling in size the rhinoceros and hippopotamus of the old continent. Since the reading of his first report, Prof. Owen had received three molar teeth belonging to the upper jaw of the *Diprotodon*; the crown of each tooth was divided into two principal transverse ridges, like those of the lower jaw, and the enamel presented the wrinkled and punctate surface peculiar to the genus. With these was found a large scalpriform incisor, whose bevelled cutting edge showed that it worked upon a similar tooth in the lower jaw. The *Diprotodon*, therefore, had molars like the kangaroo; but, instead of the two large incisors in the lower jaw being opposed to six smaller in the upper, as in the kangaroo, it had two large incisors above as well as below, agreeing in form and structure, and relative size, with those of the *Wombat*. Prof. Owen considered himself justified in concluding that the *Diprotodon* combined the characters of *Phascolomys* with those of *Macropus*, exhibiting both upon a gigantic scale, and constituting one of those links in the chain of being which the course

* *Recherches sur les Organes Locomoteurs des Spores des Algues* (*Ann. des Sc. Nat.*, 2nd Series, 1843, vol. xix. p. 266. pl. 10.). In that memoir I have erroneously designated the *Conferva crispata* by the name of *C. rivularis*.

of time has broken and destroyed. Prof. Owen also stated that a large collection of bones of the *Dinornis* had been obtained from a new locality by Mr. Percy Earle. This collection contains four of the species of *Dinornis* already described, including the three most remarkable for gigantic stature. One of these, with a stature nearly equalling the ostrich, presents in all the bones of its leg double the thickness in proportion to their length, and must have been the strongest and most robust bird in proportion to its size that ever existed. Of the gigantic species, vertebræ, ribs, and an almost entire sternum, most resembling that of the *Apteryx*, have been obtained. The Rev. Mr. Williams has also transmitted the cranial portion of a skull related in size to the *Dinornis struthoides*, manifesting many peculiarities and a striking resemblance to the same part in the Dodo and *Apteryx*.—*Proc. Brit. Assoc. Cambridge*.

METEOROLOGICAL OBSERVATIONS FOR JUNE 1845.

Chiswick.—June 1. Overcast and fine. 2. Very fine: sultry. 3. Sultry: rain at night. 4. Showery. 5. Slight rain: cloudy: boisterous at night. 6. Cloudy and windy. 7. Very fine: showery, and boisterous at night. 8. Boisterous: clear and fine. 9. Very fine. 10—12. Very fine: sultry: clear and fine at nights. 13. Foggy: sultry. 14, 15. Very hot and sultry. 16. Overcast. 17. Sultry. 18. Rain: clear at night. 19. Hazy: very fine. 20. Cloudless: very fine. 21—23. Very fine. 24. Uniformly overcast: heavy rain: clear. 25. Cold and dry: cloudy: rain. 26. Cloudy: fine. 27. Rain. 28. Overcast: heavy showers: clear. 29. Very fine. 30. Slight rain: very fine.—Mean temperature of the month $1\frac{1}{2}^{\circ}$ above the average.

Boston.—June 1. Rain: rain early A.M.: rain A.M. 2. Fine. 3. Fine: 2 o'clock P.M. thermometer 72° : rain P.M. 4. Fine: thunder and lightning, with rain P.M. 5. Cloudy: rain early A.M. 6. Windy. 7. Fine: rain P.M. 8. Cloudy. 9. Fine. 10. Fine: 3 o'clock P.M. thermometer 74° . 11. Fine: 1 o'clock P.M. thermometer 75° . 12. Fine: 4 o'clock P.M. thermometer 76° . 13. Fine: 1 o'clock P.M. thermometer 78° . 14. Fine: 12 o'clock noon thermometer 78° . 15. Cloudy. 16. Cloudy: 1 o'clock P.M. thermometer 78° . 17. Fine. 18. Cloudy: rain early A.M.: rain A.M. and P.M. 19. Fine. 20. Cloudy. 21. Fine. 22. Cloudy. 23. Fine. 24. Fine: rain, with thunder and lightning P.M. 25. Cloudy. 26. Fine. 27. Cloudy: rain A.M. and P.M. 28. Cloudy: rain A.M.: thunder and lightning 1 P.M. 29. Fine. 30. Fine: rain early A.M.—N.B. The warmest June since June 1826.

Sandwick Manse, Orkney.—June 1. Cloudy. 2. Cloudy: clear. 3. Bright: cloudy. 4. Showers. 5. Bright: showers. 6. Bright: drops. 7. Clear: fine. 8. Drops: rain: clear. 9. Drops: cloudy. 10. Bright: damp. 11, 12. Bright: cloudy. 13. Bright: clear. 14. Damp: cloudy: fine. 15. Cloudy: rain. 16. Fog. 17. Bright: damp. 18. Rain: damp. 19. Bright: clear. 20. Bright: damp. 21. Cloudy. 22. Showers: cloudy. 23. Bright: cloudy. 24. Damp: fine. 25. Bright: showers: cloudy. 26. Rain: damp. 27. Showers. 28. Cloudy: showers. 29. Showers: clear. 30. Cloudy: clear.

Applegarth Manse, Dumfries-shire.—June 1. Fine soft rain. 2. Very fine: fair. 3. Fine rain. 4. Showers all day. 5. Rain continued. 6. Rain. 7. Soft showers. 8. Heavy rain A.M.: fair P.M. 9. Showers. 10. Fair and growing. 11—14. Very fine summer day. 15. Very fine summer day: thunder: a few drops of rain. 16. Showery all day. 17. Slight showers. 18. Slight showers P.M. 19, 20. Fair and fine. 21. Fair and fine: a few drops: rain. 22. Fair and fine: very dry. 23. Fine: one slight shower. 24. Rain, very heavy. 25. Showers. 26. Fair and fine. 27. Rain: wind: thunder. 28. Fair and clear. 29. Fair A.M.: shower P.M. 30. Showers.

Mean temperature of the month	$56^{\circ}\cdot55$
Mean temperature of June 1844	$55\cdot10$



Owen, Richard. 1845. "On the extinct mammals of Australia, with additional observations on the genus *Dinornis* of New Zealand." *The Annals and magazine of natural history; zoology, botany, and geology* 16, 142–143.
<https://doi.org/10.1080/037454809495917>.

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