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CONDUCTED BY

P. J. SELBY, Esq., F.L.S., GEORGE JOHNSTON, M.D.,
CHARLES C. BABINGTON, Esq., M.A., F.R.S., F.L.S., F.G.S.,
J. H. BALFOUR, M.D., Prof. Bot. Edinburgh,

AND

RICHARD TAYLOR, F.L.S., F.G.S.

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256 Rev. M. J. Berkeley on a new species of Closterium.

plates being probably suppressed; finally, that the basal or stem-bearing plate is the homologue of the madreporiform body.

It was our intention to have added some illustrations to the present memoir, but on consideration we think it better to run no risk of misrepresenting Prof. Müller.

XXIII.—Description of a new species of Closterium (Closterium Griffithii). By the Rev. M. J. BERKELEY, M.A., F.L.S.

[With a Plate.]

A PRETTY but rather puzzling little Alga has been nursed for two years or more by Dr. J. W. Griffith in bog water, in which it has multiplied, without however giving any opportunity of ascertaining its mode of propagation. I have lately had occasion to examine mounted specimens, accompanied by a magnified representation of the plant in a living state, and from these and notes communicated by Dr. Griffith, who is preparing a work on the microscope, to the appearance of which I am looking forward with much interest, it is quite clear that it belongs to the genus Closterium, notwithstanding its comparatively minute size, the absence of curvature, and the hitherto unobserved copulation of the filaments. The circulation, which can only be seen under a power of from 1000 to 1500 diameters, is precisely that of Closterium, and the green colour and absence of lateral marking forbid the notion of its being a Synedra, though there are one or two species figured by Kützing to which it has some resemblance in point of form. The species may be characterized as follows :---

Closterium Griffithii. Minutum rectum fusiforme medio turgidulum, utrinque fortiter attenuatum apicibus acutissimis setaceis hyalinis. Long. 033-025 unc., centro lat. 0002-0016.

At first the frond is green, but a hyaline band is at length formed in the centre, where division ultimately takes place. *Closterium setaceum* resembles it somewhat in form, but that is more swollen in the centre, much longer, striated, and the tips of the fronds are curved. The var. β . of *C. cornu* approaches it in size, but the whole outline is extremely different. There can be no doubt of its being a very distinct species. The figure (Pl. XIV. fig. 2) represents three individuals in different stages of growth magnified 450 diameters. The species belongs to the genus *Stauroceras*, Kütz., which is very properly considered as part of *Closterium* by Mr. Ralfs.

