The elaborate stream-measurements thus go for naught. They give no clue whatever to the absolute rate of continental lowering through erosion. They merely emphasize the fact of the relative impotency of stream-work in general. They bring into strong contrast the tremendous effects of other geologic agencies of degradation and of aggradation which we have long been accustomed entirely to ignore, or to give only scant consideration.

Charles Keyes

CLADONEMA

In looking up the date for the species of the flagellate protozoon, *Cladonema laxum* Kent 1871 (*Anthophysa laxum* Kent), I found that Seville Kent had proposed for this species the name *Cladonema*,[1] having derived it from the Greek, *klados*, branch, and *nema*, thread. His type species is *C. laxum*, of which he wrote: "This species was first briefly described by the author, with an accompanying figure, in the *Monthly Microscopical Journal* for December, 1871, under the title of *Anthophysa laxa;* the isolated instead of clustered mode of attachment of the animalcules to their pedicle, added to the flexible, thread-like aspect and consistence of their structure, distinguishes it, however, so conspicuously from the representatives of either the genus *Anthophysa* or other allied forms described in this treatise, that a new generic name has been created for its reception," *i. e., Cladonema.*

References to *Cladonema* in the literature earlier than 1880 lead the writer to trace back the name to 1843. In *Ann. des Sci. Nat.* for that year, 11e serie (Zoologie), Tome 20, pp. 370–3, Dujardin listed a new medusa, for which he proposed the name *Cladonema radiatum.* This form had developed from the hydroid *Stauridium* (see description, p. 372). Krohn in 1853[2] accepted the name for the medusa, and only differed from Dujardin's interpretation in minor points in the development into the *Stauridium.* Others to recognize the name *Cladonema* for the medusa prior to 1880 are: Kefferstein und Ehlers, 1861, *Zool. Beitraege,* Neapel, Messina, p. 85, taf. 13, Fig. 5; Van Beneden, 1866, *Mem. Acad. Roy. Belgique,* Tome 36, p. 139, pl. 12; Hincks, 1868, "Hist. Brit. Hydroid. Zooph.," p. 62, pl. 11; Allman, 1872, "Monog. Tubul. Hydroids," pp. 216, 357, pl. 17, Figs. 1–10; and Haeckel, 1879, "Syst. der Medusen," p. 109.

Mayer, in his "Medusa of the World," Pt. I. (Carnegie Inst. Pub.), 1910, recognizes the name *Cladonema* for the medusa form and gives the full bibliography (p. 99). In Pt. III. of this work, p. 719, he writes under the caption "Preoccupied Generic Names":

> The establishment of the Commission upon Zoological Nomenclature and the general recognition which the code that controls its decision has won for itself among naturalists makes it more than ever desirable that the validity of the generic names we now use should be firmly established. Accordingly, the tenability of each and every generic name adopted in this work has been made the subject of thorough research, and I am somewhat surprised to find that names which have been used for generations without question of their priority are actually preoccupied for other groups of animals and can not be applied to the medusæ.

He lists five such cases, *Corynitis, Slabberia, Turris, Tiara* and *Laodicea. Cladonema,* however, remains established for the medusa form.

It seems evident from the above that Kent proposed the name *Cladonema* for the Infusorian without knowing that the name was already occupied. Hence the former name *Anthophysa* Bory, 1822 (?), must be revived for the reception of this species, or a new name proposed.

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[1] Manual of the Infusoria, Vol. I., London, 1880, pp. 264–65.

[2] *Mueller's Arch. f. Anat. u. Physiol.,* 1853, p. 420.

SCIENTIFIC BOOKS

The British Rust Fungi (Uredinales), their Biology and Classification. By W. B. Grove, M.A. Cambridge, at the University Press. 1913. Pp. xii + 412.