conical tubercles; *b*, thick spindles about 0.14 mm in length by 0.07 mm in diameter, provided with numerous prominent tubercles. These spicules are not easy to find among the amorphous calcareous debris, but I have found them in several preparations.

Remarks.—I am of the opinion that there are sufficient reasons for believing that this fossil was a part of the axis of an alcyonarian belonging to the Scleraxonia division of the Order Gorgonacea. The surface grooves probably correspond with the positions in which the main nutritive canals were situated, such grooves being occasionally found on the axis of Recent Gorgonacea. The black substance probably corresponds with the horny matter (usually called "keratin") which is commonly found in the axis of Gorgonacea. The amorphous calcareous matter may have been formed in the course of time by the solution of calcareous spicules and redeposition in an amorphous form. Some of the spicules remain in an unaltered condition. The long needle-shaped spicules (*a*) agree very closely with the spicules found in the sheath of the axis of the species of the Recent genus *Iciligorgia*, belonging to the Scleraxonia. The spindle-shaped spicules are similar to some of the spicules found in the axis of *Iciligorgia orientalis* of Australian waters.

The fossil has a diameter much greater than that of the main stem of any species of *Iciligorgia* I have seen, indicating that the whole colony must have been originally of great size; but specimens of another genus of Scleraxonia, *Paragorgia* of the Norwegian fjords, have been dredged with a diameter of the stem much greater than that of this fossil.

I do not consider that we are justified in referring this fossil to the genus *Iciligorgia* or to any other genus of Recent Gorgonacea, and as a new generic name must be found I would suggest that it be called *Eogorgia sullivani*, genotype and holotype, U.S.N.M. No. 510859.

BOTANY.—*New grasses from Oregon.*[1] AGNES CHASE, Bureau of Plant Industry.

Among grasses recently received from Professor Morton E. Peck, collected by him in little known regions of Oregon, are two undescribed species. One, a species of *Pleuropogon* is of especial interest, since it has paleas awned from near the base of the keels as in the type species of the genus, *P. Sabinii* R. Br. of Arctic America, which suggested the generic name. The only other species hitherto known, *P. californicus* (Nees) Benth. and *P. refractus* (A. Gray) Benth., of the Pacific Coast of the United States, have paleas toothed only. The new species is not closely related to *P. Sabinii*, which is a low plant, with small spikelets with awnless lemmas and paleas with short dorsal

[1] Received December 8, 1937.

awns, but resembles *P. refractus*, except that the spikelets are ascending, not reflexed or drooping. Two specimens of this undescribed species were in the National Herbarium in the cover of *P. refractus*, the well-developed though inconspicuous dorsal awns of the palea having been overlooked. One of these is chosen as the type, since it shows well developed rhizomes and has longer spikelets than has Professor Peck's specimen.

The other undescribed grass is a tall, rather coarse species of *Poa* from the region of Metolius River, which forms the southern boundary of Warm Springs Indian Reservation. Professor Peck writes, in answer to my inquiries, "The *Poa*, no. 19804, is from a point remote from any Erosion Control project. It seems quite certain to me that the plant is native. I find no indications of rhizomes and feel sure there were none." In the last two years a number of Old World grasses have appeared in the United States, hence it was necessary to study the whole genus before venturing to propose a new species in so large and variable a genus as *Poa*. But careful search of species of America, North and South, and of the Old World, fails to find any showing the combination of characters found in Professor Peck's specimen.

Pleuropogon oregonus, sp. nov.

Perennis; culmi 55–90 cm alti, e rhizomatibus tenuibus, erecti; vaginae internodiis longiores, scaberulae; ligula 4–5 mm longa, subhyalina, laciniata; laminae erectae, planae, 8–18 cm longae, 4–7 mm latae, acuto-mucronatae, subscaberulae; racemus suberectus, 6–16 cm longus; pedicelli 2–12 mm longi; spiculae 6–8, adscendentes, 7–13-florae, 1.5–4 cm longae; glumae pallidae, subhyalinae, 2–4 mm longae, enerves; lemmata 5.5–7 mm longa, 3 mm lata, 7-nervia, purpurea, scabra, apice lato, hyalino; arista 6–10 mm longa, scabra; palea lemmata aequans, dorso infra medium biaristato.

Perennial with slender rhizomes with purplish-red scales and long soft internodes; culms erect, 55 to 90 cm tall, rather soft and spongy; sheaths overlapping, the lower rather loose, purplish red, nearly smooth, the others scaberulous, striate; ligule 4 to 5 mm long, white, subhyaline, lacerate; blades erect, flat, 8 to 18 cm long, 4 to 7 mm wide (the uppermost reduced), abruptly narrowed into an acute, mucronate-tipped apex, slightly scaberulous on the upper or on both surfaces; raceme suberect, the slender slightly flexuous axis 6 to 16 cm long with 6 to 8 ascending spikelets on slender pedicels 2 to 12 mm long; spikelets loosely 7- to 13-flowered, 1.5 to 4 cm long (excluding the awns); glumes pale, subhyaline, 2 to 4 mm long, nerveless, often erose; rachilla joints 2 to 3 mm long; lemmas 5.5 to 7 mm long, about 3 mm wide, strongly 7-nerved, purplish and scabrous, except at the broad hyaline pale erose summit, the midnerve extending into an erect scabrous awn 6 to 10 mm long; palea as long as the lemma subhyaline, each of the keels bearing, about one-third from the base, a slender, scabrous, erect to spreading awn, from 2 to 7 mm long, the pair of a single palea often unequal, the summit of the palea hyaline the nerves extending into delicate teeth.

Type in the U. S. National Herbarium, no. 913360, collected at Union, Oregon, June 8, 1901, by A. B. Leckenby.

FIG. 1.—*Pleuropogon oregonus.* Raceme, ×1; floret, ×5.

Only known from Oregon, two additional collections being *Peck* 19568, wet meadow, 16 miles east of Adel, Lake County, and *Cusick*, in 1886, without locality, probably Union.

Poa Peckii, sp nov.

Perennis; culmi caespitosi, erecti, circa 100 cm alti foliosi; vaginae internodiis longiores, carinatae, scabrae; ligula firma, 0.3–0.4 mm longa; laminae firmae, planae vel conduplicatae, acuminatae, 30–45 cm longae, 3–5 mm latae, utrinque scabrae, supra sparse pilosae; panicula 17 cm longa, ramis fasciculatis, scaberrimis; spiculae subcrebrae, compressae, 3–5-florae, 5–5.5 mm longae; gluma prima lanceolata, acuminata, 2.5–2.8 mm longa; gluma secunda latior, 3–3.5 mm longa; lemmata 3.5–4 mm longa, acuminata, sub lente minutissime papillosa, basi arachnoidea, nervis mediis marginalibusque infra medium villosis, inter nervos glabra.

FIG. 2.—*Poa Peckii.* Floret and spikelet, ×20.

Perennial, without rhizomes, rather pale; culms tufted, erect, about 100 cm tall, leafy; sheaths overlapping, carinate, scabrous, the lowermost papery becoming shredded; ligule firm, 0.3 to 0.4 mm long; blades firm, flat or folded or subinvolute toward the acuminate boat-shaped tip, 30 to 45 cm long, 3 to 5 mm wide, scabrous on both surfaces and sparsely pilose, the hairs appressed, some retrorsely so toward the summit; panicle long-exserted, rhomboid-pyramidal, open, 17 cm long, the branches in distant fascicles of 3 or 4, very scabrous, naked and simple below, those of the lowest whorl 3.5 to 9.5 cm long; spikelets rather crowded on short scabrous pedicels on the short branchlets of the upper half to two-thirds of the main branches, strongly compressed, tawny, 3- to 5-flowered, 5 to 5.5 mm long; glumes acuminate, the first lanceolate, 2.5 to 2.8 mm long, the second broader, 3 to 3.5 mm long; lemmas 3.5 to 4 mm long, acuminate, under a lens very minutely papillose, copiously webbed at base, silky-villous on the lower third to half of the keel and marginal nerves, glabrous between the nerves.

Type in the U. S. National Herbarium no. 1,720,372, collected in dry woods, along Metolius River near Camp Sherman, Jefferson County, Oregon, July 11, 1937, by Morton E. Peck (no. 19804).

This species is most nearly related to *Poa occidentalis* Vasey of Colorado and New Mexico, from which it differs in the more scabrous foliage, the minute firm ligule, the longer, firmer blades, appressed-pilose on the upper

surface, the shorter, less open, more densely flowered panicle, and in the shorter lemmas, minutely papillose under a lens.

BOTANY.—*Some new snow algae from North America.*[1] ERZSÉBET KOL,[2] Szeged, Hungary. (Communicated by H. H. BARTLETT.)

During my sojourn in America in 1936 I had the opportunity to work in the laboratory of the Department of Botany of the University of Michigan, for which I am very thankful. Professor William Randolph Taylor was so kind as to give me his algal collections from British Columbia to look over. I found in these collections some interesting snow samples, but I could not study the whole collection in the short time available. The snow samples No. 38 and No. 60 contained some *Raphidonema* specimens which, to my knowledge have not previously been described from the snow fields of North America.

The snow samples which form the subject of this report were collected in 1923 and 1925. A full account of the type of country in which the collections were made will be found in Taylor's account (1928).

Sample number 38 was collected at an elevation of about 7000 feet in Eagle Pass Mountains, British Columbia, September 3, 1923, and contained the following kryobionts: *Raphidonema brevirostre* var. *canadense*, var. nov., *R. nivale* var. *taylori*, var. nov., *R. sabaudum* f. *minus*, f. nov., *Chlamydomonas nivalis* Wille?, and *Chionaster nivalis* (Bohl.) Wille. With the exception of *R. sabaudum* f. *minus* the same forms were found in sample number 60, collected at Lakes of S. Grizzly group, British Columbia, August 31, 1925.

Raphidonema brevirostre Scherffel var. *canadense*, var. nov. Figs. 1–2

Filaments short, consisting of 4–8–16–32, straight or curved with slightly pointed ends. Cells usually not as long as broad, or cylindrical, 1–1.5μ diam. and 0.8–1.5μ long. Cell wall thin. Chromatophore yellowish-green, single, a parietal plate without pyrenoid or starch.

Vegetative reproduction by cell division and by separation of the filament into two parts. The filament breaks transversely into two portions, the newly fractured ends of which eventually develop the taper characteristic of this species.

Nearly related to *R. brevirostre*, differing in the slightly smaller average dimensions.

[1] Paper No. 620 from the Herbarium and the Department of Botany of the University of Michigan. Received November 9, 1937.

[2] Holder of the International Fellowship Crusade of the American Association of University Women fellowship for the academic year 1935–36; for which the writer is deeply grateful.