

small *x*. Like *ampere*, *angstrom* is spelt with a small *a* and without diacritical mark, but the symbol is *A*. The spelling *disk* is adopted as being more English, and *diaphragm* is advocated, and also the use of a hyphen between vowels in such words as *photo-electric*. However, the spellings *tho* and *thru* are considered too different from the accepted forms and too distracting to the reader. We make no claim to consistency; in fact this is foreign to the spirit of the English language. In each case we try to adopt the form which is simpler, clearer and less distracting to most readers; but we can not hope to suit every one. Many will think we go too far, while others will accuse us of being too conservative.

This service to authors and readers requires much careful work, but we hope it is worth the time and effort expended.

GORDON S. FULCHER

Managing Editor of the Physical Review

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THE FRESH-WATER SPONGE, *SPONGILLA LACUSTRIS* LINN., IN MASSACHUSETTS

DURING the late summer of 1924 there was found in the Sudbury River, near the village of Concord, Massachusetts, great masses of the fresh-water sponge, *Spongilla*, growing from a muddy bottom. The occurrence of such large masses of fresh-water sponges is not common, and since this species has not been described from Massachusetts, it seemed desirable to record it.

As one looked into the water the whole river bottom appeared to be covered with many green stalagmitic growths. Upon closer examination, these growths proved to be sponges, averaging about 15 cm in height, the largest reaching a height of about 30 cm. The sponges showed profuse branches of varying diameter tapering at the distal ends. The branching could almost be described as dichotomous. The average diameter of the main stalk was about 8 mm, varying from 3 mm in the shortest specimens to 12 mm in the longest ones. Each stalk was fixed to some river weed, particularly to the fresh-water eel grass, *Vallisneria spiralis* L., of which there was an abundance. The intense green color of the sponges was found to be caused by the presence of large numbers of green algae living epizoaically. By far the greater number of these algae belong to the *Protococcales*, although there were many diatoms.

The river bottom is extremely muddy, making it impossible to collect the sponges by wading. The current has a low velocity so that the water is clear. The depth of the river at mid-channel varies from

2.5 to 3 meters in the spring, to about 1 meter in late summer. The animals near the banks at this latter season may be bent over horizontally parallel with the surface of the river, while in some cases the water may have receded sufficiently to expose entire colonies.

From the manner of growth and of branching, from the size and appearance of the skeletal and dermal spicules, the species was tentatively identified as *Spongilla lacustris* Linn. Measurement of 100 skeletal spicules, including all lengths, showed an average length of 0.300 mm (a slightly larger figure than that reported by Potts¹) and an average diameter of 0.012 mm; while the dermal spicules, exhibiting much less variation, showed an average length of 0.047 mm and an average diameter of 0.0029 mm. The mode for length of skeletal spicule was 0.315 mm, the maximum and minimum lengths being 0.355 mm and 0.285 mm, respectively. It is also to be noted that instead of the swiftly running water habitat, usually reported for this species, these specimens were attached to a deep mud bottom in a slowly moving stream and were supported by water plants.

The approximate location of this habitat is an area of about 280 square meters extending along the bottom of the Sudbury River nearly half way between Nashawtic (Echo) Bridge and the railroad bridge of the Boston and Maine, Southern Division, at Concord, Massachusetts.

Although search was made from August up to the middle of December (long after several severe frosts, and once after the river had been frozen over), no gemmules have been found, preventing a positive identification of the species. Professor Frank Smith, however, who has examined formaldehyde specimens, reports the same tentative identification as given above.

W. H. COLE

D. POTTER

BIOLOGY DEPARTMENT, CLARK UNIVERSITY

WORCESTER, MASSACHUSETTS

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A NATURAL SEISMOGRAPH

A FEW days before the earthquake of February 28th there was rain over the snow-covered fields of Gaspé. This froze into a hard crust. The morning after the earth tremor this crust over the snow fields was found to be cracked in long parallel lines running N.W. to S.E., a little E. This observation is reported to me by Mr. F. J. Richmond, of Gaspé, a close observer, who adds that when snow settles nat-

¹ Edw. Potts. Contributions towards a synopsis of the American forms of fresh-water sponges with descriptions of those named by other authors and from all parts of the world. *Proc. Acad. Nat. Sci.*, Philadelphia, 1887.