

Potts Point, Maine, in a specimen obtained by Mr. H. Bilgram near Philadelphia in 1914, and in a growth which appeared on Sphagnum in a glass-house in the Botanic Gardens, Edinburgh; it is probably also present in the type of *Lachnobolus Rostafinski*, a mounting of which was lent us many years ago; but the direction of the spirals was not properly noted in a drawing made at the time. The type of *H. Varneyi* Rex, from Kansas, which was included under the present species in the previous editions of this book, has sinistral spirals on the elaters, and is probably a weak form of *H. clavata*.

Hab. On decayed wood, and moss.—Edinburgh (glass-house), Bohemia, Maine, Pennsylvania.

7. *H. abietina* Lister Mycetozoa, ed. 2, 227 (1911) (*abies* fir tree). Plasmodium rose-red. Sporangia crowded or gregarious, shortly stalked or sessile, subglobose or turbinate, rarely shortly cylindrical, 0.3 to 0.7 mm., opaque or shining, yellow, ochraceous, or apricot-coloured; sporangium-wall membranous, yellow, almost smooth, usually evanescent above and forming a persistent cup below. Stalks slender, ochraceous, 0.1 to 0.3 mm. long, filled with spore-like cells. Capillitium a tangle of flaccid, sparingly branched, ochraceous-yellow threads, 3 to 5 μ diam., marked with one to three slender prominent bands forming an irregular loose spiral, with few rounded or bulbous free ends. Spores yellow, minutely warted, 9 to 12 μ diam.—*Trichia abietina* Wigand in Pringsh. Jahrb. Bot., iii. 33, t. ii, fig. 11 (1863). *T. nana* Mass. in Journ. R. Micr. Soc., 1889, 336; Mass. Mon., 181. *Hemiarcyria Wigandii* Rost. Mon., 267 (1875). *Arcyria Wigandii* Mass. l.c., 163 (1892). *Hemitrichia ovata* Macbr. N. Am. Slime-Moulds, ed. 2, 261.

Pl. 168.—*c.* sporangia; *d.* capillitium and spore (Germany); *e.* sporangia (United States).

This species somewhat resembles the occasional *Hemitrichia* forms of *Trichia varia*, but is distinguished by the stalks when present being filled with spore-like cells, by the often well defined cup-like base of the sporangium-wall, and by the flaccid capillitium marked with slender spiral bands which are not more prominent on one side of the thread. The type of *Trichia nana* Mass. from Westbrook, Maine (K. 1164) is a sessile form of *H. abietina*. Rostafinski refers to having seen a specimen of this species in Persoon's herbarium named *Trichia ovata*, but he did not adopt that name as there were many other specimens in that collection named *Trichia ovata* which were species of *Trichia*. M. Meylan has published two varieties of the present species which appear to differ little from the typical form, var. *lutea*, and var. *aurantiaca*, described as being yellow and orange respectively (Bull. Soc. Vaud. Sc. Nat., xlv. 53 (1910)).

Hab. On dead wood or on the trunks of living trees: not common; recorded from Cornwall, Devon, Hampshire, Surrey; Norway, Sweden, France, Germany, Bohemia, Switzerland, Portugal, Japan, Ontario, New England, Ohio, and Colorado.

8. *H. Karstenii* Lister Mycetozoa, 178 (1894) (P. A. Karsten, a Finnish botanist, 1834 to 1917). Plasmodium watery-white.