

Twenty first meeting.

College of Physicians and Surgeons, Columbia University. March 20, 1907. President Flexner in the chair.

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A study of the vital conditions determining the distribution and evolution of snails in Tahiti, with illustrations.

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In presenting the more important results of a recent study in the field of terrestrial pulmonates of the island of Tahiti, belonging to the genus *Partula*, it was shown that different valleys contain forms that, on account of their more or less complete isolation, have come to differ in correlation with their geographical proximity or remoteness. The vital conditions that limit the snails of this island to their particular stations are dryness peripherally, where the valleys debouch upon the coastal alluvial plain, and lower temperature centrally. Only rarely may stragglers pass from one region to another.

Evidence was adduced showing that "mutations" have arisen at various recent times. The observations of Garrett and Mayer, taken in connection with the results of the writer, make it certain that at least three forms have thus originated, at dates that may be determined with substantial accuracy. It was furthermore shown, in corroboration of Mayer's contention, that the environmental conditions cannot be regarded as the factors that have produced the several specific and varietal differentia exhibited by the Tahitian snails.