

Twenty seventh meeting.

*Schermerhorn Hall, Columbia University. February 19, 1908.
Vice-President Morgan in the chair.*

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An exhibition of photographs of chromosomes, with explanatory comment.

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The speaker exhibited a series of lantern-slides from direct photographs, showing the sexual differences of the chromosomes in a number of species of insects. The facts have now been determined in nearly sixty species, all of which conform to the same principle that the spermatozoa are of two numerically equal classes, one of which is male-producing, the other female-producing. This is proved by the relations of the chromosomes. The two classes of spermatozoa show certain constant differences in this regard, differing in respect to one pair of chromosomes, and in a few cases in respect to two or three pairs. The somatic chromosome-groups of the two sexes show precisely parallel differences in every known case; and a study of the facts in detail proves that these differences must be due to the fertilization of the egg by one or the other class of spermatozoon. This conclusion, first reached by strictly cytological researches on the germ-cells of insects, has recently received complete experimental confirmation in the work of Correns on the diecious flowering plants.