

Eggs placed within two or three minutes after insemination in sea-water containing the following anesthetics were found to retain the condition of low water-permeability (the state characteristic of unfertilized eggs) during the period of exposure to the anesthetic, *e. g.*, 30 minutes or more; if they were then brought back into normal sea-water the permeability underwent the usual increase and development continued. Chloral hydrate, chloroform, alcohols (methyl, ethyl, propyl, isobutyl, i-amyl), ethyl urethane, ether, all show this effect in appropriate concentrations, which are approximately the same as those required for anesthetizing the cleavage-process. It is clear therefore that the permeability-increasing phase of the activation-process, after it has once started, may be temporarily inhibited by anesthetization. Potassium cyanide has a similar effect, but only in relatively high concentrations (above $n/200$, with some slight effect at $n/400$); in lower concentrations, *e. g.*, $n/1,000$ (which is many times greater than that required to arrest cleavage completely), no evident effect was observed. It is probable that the anesthetics inhibit the permeability-increasing process by a different kind of influence from that exerted by cyanide.

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THE AMERICAN SOCIETY OF NATURALISTS

THE thirty-fifth annual meeting of the American Society of Naturalists was held in the Carnegie Museum, Pittsburgh, January 1, 1918. In affiliation with the society this year were Section F of the American Association for the Advancement of Science and the Botanical Society of America.

The report of the treasurer, stating a balance on hand of \$657.11, was accepted.

The following changes in the constitution, recommended by the executive committee, were authorized.

Article II., Section 1, the following sentence to be added: A nomination for membership in the society shall remain in the hands of the executive committee for at least one year before action is taken upon it.

By-law 2 to read: Each president on retiring shall appoint a committee of five to nominate officers and this committee shall present names for action by the society at its next annual meeting.

The following new by-law to be added: A publication committee, consisting of the three past-presidents, the secretary and the treasurer may select and arrange for the publication of papers presented before the society, provided that the society thereby is not involved in financial obligations.

It was recommended by the executive committee that the American Society of Naturalists co-operate with other biological organizations by electing two botanical members to serve on the committee on botanical abstracts, and that these members shall be nominated by the executive committee. This recommendation was adopted by the Society and the following were elected to represent the American Society of Naturalists on the committee on botanical abstracts: J. Arthur Harris (1919-20), Edward M. East (1919-22).

A resolution, as follows, framed by a committee consisting of Albert J. Blakeslee and Leon J. Cole, was adopted, and the secretary was instructed to forward a copy of it to the National Research Council.

Realizing the importance of placing all men who enter the national service where their training and abilities may be utilized to the maximum in the prosecution of the war, and in view of the experience of our allies, who at first failed to take advantage of the technical fitness of recruits for special war activities both at home and at the front and who later found it necessary to make readjustments at great loss of time and energy—be it

Resolved, That the American Society of Naturalists urge upon the National Research Council the desirability of taking such steps as may be necessary to secure the detailing to special scientific duty of men with technical training and ability who may have been called to military service, but who are found essential to scientific activities of the war.

There were elected to membership: Ethan A. Andrews, Johns Hopkins University; Ernest B. Babcock, University of California; Frank S. Collins, North Eastham, Mass.; Thomas H. Goodspeed, University of California; William H. Gregory, American Museum of Natural History; Heman L. Ibsen, University of Wisconsin; Karl F. Kellerman, U. S. Department of Agriculture; Vernon L. Kellogg, Stanford University; Richard S. Lull, Yale University; Robert K. Nabours, Kan-

sas Agricultural College; Charles D. Walcott, Smithsonian Institution; Charles Zeleny, University of Illinois.

On Saturday evening members of the Naturalists and of the affiliated societies attended a smoker given by the biologists of Pittsburgh at Carnegie Music Hall.

A symposium was presented in the afternoon session on the subject, *Factors of organic evolution*.

Climatic change as a factor in organic evolution, by ELLSWORTH HUNTINGTON. (Read by title.)

Migration as a factor in organic evolution, by C. C. ADAMS.

Method of reproduction as a factor in organic evolution, by E. M. EAST. (Read by title.)

Mutation as a factor in organic evolution, by T. H. MORGAN.

Mendelian inheritance as a factor in organic evolution, by C. B. DAVENPORT.

Natural selection as a factor in organic evolution, by J. ARTHUR HARRIS.

Disease as a factor in organic evolution, by THEOBALD SMITH. (Read by title.)

Intelligence as a factor in organic evolution, by R. M. YERKES. (Read by title.)

In addition to the symposium the following papers appeared upon the program:

Sex intergrades in Cladocera and their significance, by A. M. BANTA.

A demonstration of the origin of two pairs of female twins from two eggs of high storage metabolism, by OSCAR RIDDLE.

Changing the sex ratio in the rat through inbreeding, with selection, by HELEN D. KING. (Read by title.)

Changes in sexuality in plants, by A. B. STOUT.

Mutations in Datura, by A. F. BLAKESLEE.

Nutritional effects influencing the development of maize hybrids, by D. F. JONES. (Read by title.)

The inheritance of variations in the marginal spines of Silvanus surinamensis, by MARIAN E. HUBBARD. (Read by title.)

Parthenogenesis and inheritance in the grouse locust, Appottettix sp.?, by R. K. NABOURS.

The rôle of approaching extinction in evolution, by L. E. GRIFFIN.

Ticking, banding and silvering factors in cats in relation to the problem of mimicry, by P. W. WHITING.

Variations in somatic chromosome numbers, by R. T. HANCE.

Eleven matings in a species with heteromorphic

tetrads; recombinations expected in the F_1 , by E. ELEANOR CAROTHERS. (Read by title.)

Sex-determination in a parasitic wasp, Hadrobracon brevicornis Wes., by P. W. WHITING. (Read by title.)

The influence of sex on the color pattern of guinea-pigs, by SEWALL WRIGHT.

Atrophic fetuses in yellow mice and zygotic elimination, by J. A. DETLEFSEN. (Read by title.)

Fluctuations of sampling in a Mendelian population in mice, by J. A. DETLEFSEN. (Read by title.)

On the hybridity of Entylia sinuata Fab. and its forms occurring in nature, by S. I. KORNHAUSER. (Read by title.)

The independence of the germplasm and soma in Thelia bimaculata Fab., by S. I. KORNHAUSER.

The distribution of granular pigment in the hair of guinea-pigs, by H. R. HUNT and SEWALL WRIGHT.

Histological studies on trimerous bean seedlings, by J. ARTHUR HARRIS and J. Y. PENNYPACKER. (Read by title.)

The rôle of factor mutations in evolution, by E. B. BABCOCK. (Read by title.)

The result of cousin marriages through N generations, by F. A. SPRAGG.

Germinal changes in the bar-eyed race of Drosophila during the course of selection for facet number, by CHARLES ZELENY.

The genetic and somatic relationship between vestigial and miniature wings in Drosophila amelophila, by ORREN LLOYD-JONES and F. S. HULTZ.

The Naturalists' dinner was held on the evening of January 1 at the Hotel Schenley with fifty in attendance. The address of the president, Dr. George H. Shull, was entitled "The genotype and its environment."

The officers of the society for 1918 are:

President—William E. Castle, Harvard University.

Vice-president—Guy N. Collins, United States Department of Agriculture.

Secretary—Bradley M. Davis, University of Pennsylvania (1917-19).

Treasurer—J. Arthur Harris, Carnegie Station for Experimental Evolution (1918-20).

Additional members of the executive committee—Leon J. Cole, University of Wisconsin (1918); Frank R. Lillie, University of Chicago (1916-18); Raymond Pearl, Maine Agricultural Experiment Station (1917-19); George H. Shull, Princeton University (1918-20). BRADLEY M. DAVIS,

Secretary for 1917