How can these results be reconciled with Bohr's theory and with our usual conception of the electron? It is too early to answer. Bohr's stationary states and the cellular structure postulated above have many points of similarity. It seems that the electron must be regarded as a complex structure which undergoes a series of discontinuous changes while it is being bound by the nucleus or kernel of an atom. There seems to be strong evidence that an electron can exert magnetic attractions on other electrons in the atom even when not revolving about the nucleus of the atom.

IRVING LANGMUIR

RESEARCH LABORATORY,
GENERAL ELECTRIC CO.,
SCHENECTADY, N. Y.,
March 8, 1921

THE OKLAHOMA ACADEMY OF SCIENCE

THE ninth annual meeting was held in Oklahoma City on February 11, at the State University, Norman, on February 12. The following papers were read:

Presidential Address: *Research in secondary schools:* A. F. REITER.

The organization of a research council in Oklahoma: GUY Y. WILLIAMS.

On the affiliation of the Oklahoma Academy of Science with the American Association for the Advancement of Science: L. B. NICE.

The ceremonies and rites incident to eating peyote among the Cheyenne Indians: J. B. THOBURN.

The intrinsic-extrinsic mechanism of heredity and variation: H. H. LANE.

An eccentric hen—anatomically excused: A. F. REITER.

On the non-singular cubic: NATHAN ALTSCHILLER-COURT.

A survey of the taxation system of Oklahoma: F. F. BLACHLY.

The teaching efficiency of motion pictures measured in terms of results secured under schoolroom conditions: J. W. SHEPPARD.

Where did the Indians of the Great Plains get their flint? CHAS. N. GOULD.

An objective view of education in Oklahoma: MIRIAM E. OATMAN-BLACHLY.

The most important scientific spot on earth: WALT B. SAYLER.

An observation on the male Dickcissel during the nesting period: ED. CRABB.

The genetic evidence of a multiple (triple) allelomorph system in bruchus and its relation to sex-limited inheritance: J. K. BREITENBRECHER.

Some studies with complement deficient guinea pigs: H. S. MOORE.

The migration path of the germ cells in fundulus: A. RICHARDS and J. T. THOMPSON.

Nesting of mourning doves at Norman in 1920: MARGARET M. NICE.

Some notes on winter birds around Norman in 1920–21: MARGARET M. NICE.

A comparison of the rate of diffusion of certain substances, particularly the food materials, enzymes and pro-enzymes: ALMA J. NEILL.

Further observations on tonus rhythms in diaphragm muscle: L. B. NICE and A. J. NEILL.

A child's deviations from truth: SOPHIA R. ALTSCHILLER-COURT.

The range of vocabulary at eighteen months of age: MIRIAM E. OATMAN-BLACHLY.

Relation of science to art: LUCILLE CARSON.

The bank of Missouri: J. RAY CABLE.

A plan to reach the Orinoco sources: T. A. BENDRAT.

The cliff-dwellers in Mesa Verde Park, Colorado: C. W. SHANNON.

A trip across the Navajo desert: JUANITA RAMSEY.

Evidence on the Pennsylvania glaciation in the Arbuckle Mountains: S. WEIDMAN.

Toyah, Texas, oil pool: BESS MILLS.

The Marietta syncline and its effect upon the physiography of Love County: FRED BULLARD.

Deep tests in southwestern Oklahoma: WALDO PORTS.

Protozoa of Colorado: T. C. CARTER. (Read by title.)

The grand period of growth of root-hairs: R. E. JEFFS. (Read by title.)

During the session it was voted to affiliate the Oklahoma Academy of Science with the American Association for the Advancement of Science forming two classes of members, local and national.

It was also voted to establish a State Research Council in the Oklahoma Academy of Science along the same plan as the National Research Council.

It was further voted to establish a Natural History Exchange for the purpose of assistance in building museums in the colleges and high schools of the state.

The following resolutions were adopted:

1. Whereas, it is highly desirable to save the wild life in the state, the Oklahoma Academy of Science places itself on record as favoring the making of all state, municipal or other public lands and waters into game preserves.

2. Whereas, hawks and owls have been shown by the United States Biological Survey to be of far more benefit to agriculture than injury, the Oklahoma Academy of Science places itself on record against the bill now pending in the Oklahoma legislature to put a bounty on these birds.

3. Whereas, the Oklahoma Academy of Science wishes to encourage research in all branches of science, and good library facilities are absolutely necessary for such work, the Oklahoma Academy of Science places itself on record in favor of passing the bill now before the Oklahoma legislature to appropriate $50,000 to establish a State Industrial Library at the University of Oklahoma.

4. Whereas, it is to the best interest of science in the United States to have the metric system to be the standard of weights, the Oklahoma Academy of Science places itself on record in favor of the bill now pending before the United States Congress to change from our present standard of weights to the metric system.

5. Whereas, complete protection of the natural parks of the United States is essential to the happiness of the people for all generations to come, and

Whereas, the Smith bill which has recently passed the United States Senate and is now pending in the House, and also the Walsh bill, pending in the Senate, would throw open the Yellowstone National Park to predatory wealth, thus depriving the people of one of the most beautiful pleasure spots in the world, the Oklahoma Academy of Science places itself on record as being opposed to both of these bills.

The following officers were elected for the ensuing year:

President, J. B. Thoburn, Oklahoma City.
First Vice-president, Guy Y. Williams, Norman.
Second Vice-president, R. O. Whitenton, Stillwater.
Secretary, L. B. Nice, Norman.
Treasurer, H. L. Dodge, Norman.
Curator, Fred Bullard, Norman.

L. B. Nice,
Secretary

Norman, Okla.

THE WESTERN SOCIETY OF NATURALISTS—NORTHWEST SECTION

The Northwest Section of the Western Society of Naturalists met at the Oregon Agricultural College, Corvallis, Friday and Saturday, November 26 and 27, 1920. The following papers were presented at the session Friday afternoon:

Explosion of crab spermatozoa: Nathan Fasten, Oregon Agricultural College.

Some early botanists of the Northwest (illustrated): Albert R. Sweetser, University of Oregon.

A fossil cetacean from the Miocene of Newport, Oregon: E. L. Packard, University of Oregon.

Neuromotor apparatus in ciliates: H. B. Yocom, University of Oregon.

Records in eugenics: Catherine W. Beekley, University of Oregon.

Friday evening a dinner to the visiting biologists was given at Waldo Hall by the Biological Club of Oregon Agricultural College. The program following the dinner consisted of a symposium on "Biology in its relation to the development of the Northwest." The subject was discussed from the following standpoints:

Forestry: H. S. Newens, Oregon Agricultural College.

Horticulture: W. S. Brown, Oregon Agricultural College.

Zoology: Trevor Kincaid, University of Washington.

Fisheries: E. Victor Smith, University of Washington.

Fish Parasitism: Nathan Fasten, Oregon Agricultural College.

Biological Stations: Geo. B. Rigg, University of Washington.

Dr. S. M. Zeller, of Oregon Agricultural College, was elected secretary for the coming year. It was decided to hold the next meeting at the University of Washington, Seattle, during the Thanksgiving recess, 1921. The Northwest Section embraces Oregon, Washington, Idaho, Montana, Wyoming and British Columbia.

Geo. B. Rigg,
Secretary

SCIENCE

A Weekly Journal devoted to the Advancement of Science, publishing the official notices and proceedings of the American Association for the Advancement of Science

Published every Friday by

THE SCIENCE PRESS

LANCASTER, PA. GARRISON, N. Y.
NEW YORK, N. Y.

Entered in the post-office at Lancaster, Pa., as second class matter