The age of the Payette is, therefore, middle Neocene. This accords with the stratigraphic evidence. The Payette overlies, probably comformably, the Columbia River lavas, which in other localities have been determined to be approximately middle Miocene in age.

Umpleby[6] originally advanced two reasons for considering the old erosion surface of central Idaho as old as Eocene. It was predicated that the sediments of Eocene age in the surrounding region had been derived from the peneplaned area during its reduction. The Payette was not included among these Eocene formations, perhaps because of its uncertain age and because it was believed to occupy valleys cut into the peneplane. But the Payette lies in post-Payette fault valleys and in diastrophic depressions of Payette and post-Payette date, and not in pre-Payette erosion valleys, in the uplifted region of southwestern Idaho. If we apply Umpleby's reasoning, based on derivation, this important body of sediments lying in an area adjacent to the peneplane would date the old surface as middle Neocene.

A second reason for considering the peneplane Eocene was that strata of supposed Miocene age occupied valleys cut during the Oligocene in the old surface in east-central Idaho. If again we use Umpleby's correlation and reasoning but recognize the upper Miocene age of the lower Payette and hence allow lower and middle Miocene time for the erosion of the valleys instead of the Oligocene, the erosion surface would be Oligocene in age instead of Eocene. If the valleys required less than lower and middle Miocene time for their excavation the erosion surface might even have been finished in lower Miocene time.

It appears therefore that, if we follow Umpleby's reasoning, the old surface is younger than Eocene.

JOHN P. BUWALDA

UNIVERSITY OF CALIFORNIA

ORGANIZATION OF THE WEST VIRGINIA ACADEMY OF SCIENCE

A MEETING for the purpose of organizing an Academy of Science was held at Morgantown, W. Va., under the auspices of the West Virginia Scientific Society on Friday, November 28, 1924.

After an address of welcome by President F. B. Trotter, the organization was effected and the following officers elected:

President, Dr. Geo. R. Bancroft, professor of physiological chemistry, School of Medicine, West Virginia University.

Vice-president, B. R. Weimer, professor of biology, Bethany College.

Secretary, Dr. John A. Eiesland, professor of mathematics, West Virginia University.

Treasurer, A. S. White, professor of social sciences, Marshall College.

The following sectional chairmen were elected for the ensuing year:

Biological section, A. M. Reese.
Chemistry and Pharmacy, Earl C. H. Davis.
Engineering, C. R. Jones.
Geology, Mining, John L. Tilton.
Mathematics, Physics and Philosophy, John Eiesland.
Social Sciences, J. E. Winter.

Special features of the meeting were a lecture by the Honorable A. B. Brooks, chief game and fish protector of West Virginia, on "Lighting the lamp of conservation in West Virginia," and, in the evening, an illustrated lecture by Dr. Francis H. Herrick, of Western Reserve University, on "Bird and animal instinct and intelligence."

The following papers were presented:

BIOLOGICAL SECTION

Microscopic Crustacea collected in the Canal Zone: G. S. DODDS.

Breeding of corn for resistance to smut (Ustilago zeae): R. J. GARBER.

Pit of pit vipers: A. M. REESE.

Habits of brook lampreys: W. S. BOURNE.

Some aspects of the axial gradient theory of structural relationship in organisms: B. R. WEIMER.

Discharge and dissemination of fungus spores: N. J. GIDDINGS.

Some aspects of the rôle of temperature in development: L. M. PEAIRS.

Smoke injury to vegetation: J. B. RHINE.

The development of the tetral wall and coats of the pollen grain: P. D. STRAUSBAUGH.

The West Virginia University course in public health: F. E. CHIDESTER.

Migration in animals: F. E. CHIDESTER.

Leaf mold of tomato: R. C. SPANGLER.

The female gametophyte of the Trillium sessile: R. C. SPANGLER.

Fresh water mussels—(Naiades): W. L. UTTERBACK.

CHEMISTRY AND PHARMACY

Synthesis with chloro-ethers: FRIEND E. CLARK.

Variation in mineral content in Morgantown City water: W. W. HODGE.

Molecular orientation on solids in gels: EARL C. H. DAVIES.

ENGINEERING

Bridge-building in West Virginia: R. P. DAVIS.

The use of the strain gage in engineering investigations: G. P. BOOMSLITER.

[6] "An old erosion surface in Idaho," *Jour. Geol.,* Vol. 20, p. 142, 1912.

Tests on suitability of rocks of West Virginia for road-building purposes: R. B. DAYTON.

GEOLOGY, MINING

The terraces along the Monongahela: S. B. BROWN.

The conglomerate rocks of West Virginia: D. B. REGER.

The principles of soil classification: E. P. DEATRICK.

Some of the problems in oil and gas geology: E. R. SCHEFFEL.

Mining machinery: M. L. O'NEAL.

MATHEMATICS, PHYSICS AND PHILOSOPHY

Graphical methods and lines of force: R. C. COLWELL.

Some studies of absorption of light by mixed solutions: E. F. GEORGE.

The map-coloring problem: C. N. REYNOLDS.

The configuration of pencils of cubics: B. M. TURNER.

On the class of a centro-symmetric space in the theory of relativity: JOHN EIESLAND.

Logic in mathematical science: H. E. CUNNINGHAM.

Some low temperature measurements of refractive indices: F. A. MOLBY.

SOCIAL SCIENCES

Teaching of history and social science: J. F. BOUGHTER.

A study of blondes and brunettes: J. E. WINTER.

THE NEW MEXICO ASSOCIATION FOR SCIENCE

THE New Mexico Association for Science in affiliation with the New Mexico Educational Association for Science met at the State University of New Mexico, Albuquerque, on November 6 and 7. The following program was presented:

PRESIDENTIAL ADDRESS

The scientific classification of school children: DAVID S. HILL, State University of New Mexico.

AGRICULTURE

Some factors influencing the permeability of soils: C. W. BOTKIN, New Mexico College of Agriculture and Mechanic Arts.

ARCHEOLOGY

Symmetry in Pueblo pottery forms: KENNETH M. CHAPMAN, associate in ethnology, School of American Research, Santa Fe.

Introduction of weaving in New Mexico: LANSING B. BLOOM, School of American Research, Sante Fe.

Some forgotten settlements in New Mexico: PAUL A. F. WALTER, School of American Research, Santa Fe.

CHEMISTRY

Scientific adjustment to the use of inferior fuels: J. D. CLARK, State University of New Mexico.

Selected methods for the preparation of alkyl phenols: J. H. GRIFFITH, New Mexico State Teachers College, Silver City.

Utilization of oxide slag in plastic bronze manufacture: PAUL P. MOZLEY, Albuquerque High School.

EDUCATION

Faculty control of high school athletics: EDWARD LIGHTON, Albuquerque Public Schools.

The vital need of college courses in modern synthetic geometry: T. G. RODGERS, dean of the New Mexico Normal University.

The teaching of science in the high school: JESSIE SPENCER, Albuquerque High School.

Needed reforms in methods of teaching science: W. H. BALL, New Mexico Normal University.

Modern hygienic requirements in school furniture: CHARLES E. MCCLURE, Albuquerque.

ENGINEERING

Sun engines: T. T. EYRE, State University of New Mexico.

The super-power system for the electrification of the United States: P. S. DONNELL, State University of New Mexico.

SCIENCE OF LANGUAGE

The Ablaut systems of Dlo, Del, Dol and Sup, Svep, Svop: L. B. MITCHELL, dean of the College of Arts and Sciences, State University of New Mexico.

MEDICAL SCIENCE

Progress in tuberculin treatment: L. S. PETERS, Albuquerque.

Recent advances in preventive medicine and sanitation: G. S. LUCKETT, director of the State Bureau of Public Health, Santa Fe.

METEOROLOGY

Long range weather forecasting: R. S. ROCKWOOD, State University of New Mexico.

MINERALOGY

The genesis of the great low-grade copper deposits of the Southwest: E. H. WELLS, president of the New Mexico School of Mines, Socorro.

PHILOSOPHY

The relation between language and thought: GEORGE S. HUBBELL, State University of New Mexico.

PHYSICS

Distortion in vacuum tube amplifiers: R. W. GODDARD, New Mexico State College of Agriculture and Mechanic Arts.

Importance of the Clement and Desormes experiment: R. V. PRITCHARD, New Mexico State College of Agriculture and Mechanic Arts.

PSYCHOLOGY

The relation of intelligence and school progress: BENJAMIN F. HAUGHT, State University of New Mexico.