## THE OKLAHOMA ACADEMY OF SCIENCE

THE twelfth annual meeting of the Oklahoma Academy of Science was held at Oklahoma City, February 8, 1924, and at the University of Oklahoma, Norman, Oklahoma, February 9, 1924.

The following papers were read:

A curious result of the pressure-freezing point relation for water: HOMER L. DODGE.

Teaching physics in China: H. C. Roys.

Some observations on the extension in range of certain birds of the Oklahoma Panhandle: R. C. TATE.

Favorite foods of some Oklahoma birds: R. C. TATE. The mode of action of adrenalin chloride on respiration: L. B. NICE and ALMA J. NEILL.

Preliminary report on the investigation of the viscid substance covering the leaves and stem of Martynia: A. C. SHEAD.

A list of the woodpeckers found in Oklahoma prior to 1924: ED. D. CRABB.

The weight of an adult coyote: ED. D. CRABB.

MATHEMATICS, PHYSICS AND CHEMISTRY SECTION

On two circles and two spheres: NATHAN ALTSCHILLER COURT.

Illustrations explaining some astronomical phenomena: OSCAR INGOLD.

Some phases of sound: J. H. CLOUD.

A variable audible frequency and vacuum-tube generator: F. D. MARTIN.

A ''dynamic'' electrometer for oil and gas-well gases: J. D. WHITNEY.

A complete first semester laboratory course in high school physics with less expensive apparatus: D. E. ROLLER.

The calibration of a wave-meter for very short wave lengths: E. B. FERRELL.

A kinetic method of determining elastic constants of a wire at incandescent temperatures: WM. SCHREIVER.

Research problems in petroleum technology: FRED W. PADGET.

## GEOLOGY SECTION

Some notes on the Fort Apache region, Arizona: ALBERT B. REAGAN.

A new classification of Oklahoma gypsums: C. N. GOULD.

Pre-Paleozoic topography of Oklahoma: V. E. Mon-NETT.

Humidity provinces of Oklahoma: C. J. BOLLINGER.

Notes on permanent labels for thin rock sections mounted on glass slides: A. C. SHEAD.

The comparison of coal with natural gas for domestic use: C. W. SHANNON.

A summary of oil production in Oklahoma by years: BESS MILLS BULLARD. The present status of mineral production in Oklahoma: C. W. SHANNON.

Relations of the folds in the Cretaceous to the structure of the underlying rock: FRED M. BULLARD.

Preliminary paper on the distribution of Proboscidia in Oklahoma: C. E. DECKER.

Occurrence of Bison occidentalis in Oklahoma: Ed. D. CRABB.

## BIOLOGY SECTION

An apterous mutation in Bruchus: J. K. BREITEN-BECHER.

The hereditary differences in the number of eggs obtained from the white and red allelomorphs in Bruchus: J. K. BREITENBECHER.

Abnormal sex ratios and the normal sex ratios in Bruchus: Geo. E. PRITCHARD and J. K. BREITENBECHER.

Morphological adaptations of oats, wheat and barley in three associations of the grassland formations: W. E. BRUNER.

Post-natal growth curve in Cavia cobaya: M. M. WICKHAM.

The effects of certain bases on enzymes: HAROLD HULPIEU.

Life history notes—Scaphiopus—the spadefoot toad: A. I. ORTENBURGER.

Notes on the Gila monster (Heloderma suspectum): ROBERTA DEAM ORTENBURGER.

The taeniatus group of whipsnakes: A. I. ORTEN-BURGER.

A white crow: R. O. WHITENTON.

The regeneration of the anal fin of Xiphorphorus helleri: J. M. ESSENBERG.

## GENERAL SESSION

The life of Dr. L. L. Lewis: C. E. SANBORN.

The list of Oklahoma birds: MARGARET M. NICE and L. B. NICE.

Preservation of wild life: L. A. TURLEY.

The beginnings of connected speech of a two-year-old boy: SOPHIE R. A. COURT.

The speech development of a little girl: MARGARET M. NICE.

An experiment in curriculum construction: Ellsworth Collings.

Some correlation between mental ability, age and grades for college freshmen: S. L. REED.

The present financial situation in Oklahoma: FRED-ERICK F. BLACHLEY.

Executive responsibility in Oklahoma: MIRIAM E. OAT-MAN-BLACHLEY.

The officers elected for the coming year are:

President, C. E. Sanborn; first vice-president, H. L. Dodge; second vice-president, Oscar Ingold; secretary, A. Richards; treasurer, F. W. Padgett; curator, C. E. Decker.

> L. B. NICE, Secretary

NORMAN, OKLAHOMA