

MATHEMATICS IN THE UNIVERSITY OF CHICAGO.

The following university and collegiate courses in mathematics and mathematical astronomy are announced at the University of Chicago (academic year 1922-1923). All courses meet four times a week for a quarter of twelve weeks. Courses which continue for more than one quarter are indicated with Roman numerals, as I, II, III, or IV. By Professor E. H. Moore: Vectors, Matrices, and Quaternions; Matrices in General Analysis I, II, III, IV; Analytic Geometry. By Professor L. E. Dickson: Theory of Numbers I, II; Solid Analytics; Theory of Equations. By Professor H. E. Slaught: Differential Equations; Elliptic Integrals; Calculus I; Plane Trigonometry. By Professor G. A. Bliss: Definite Integrals; Elliptic Functions; Calculus II, III. By Professor E. J. Wilczynski: Projective Differential Geometry I, II; Functions of a Complex Variable; Calculus I, II; Trigonometry. By Professor F. R. Moulton: Analytic Differential Equations I, II, III; Advanced Ballistics I, II, III; Descriptive Astronomy, Sidereal Universe. By Professor W. B. MacMillan: Analytic Mechanics I, II, III; Celestial Mechanics; Descriptive Astronomy I, II. By Professor A. C. Lunn: Units and Dimensions; Dynamics of Continuous Media; Canonical Equations and Quantum Theory; Thermodynamics. By Dr. Mayme I. Logsdon: Theory of Algebraic Invariants; Calculus I, II, III; College Algebra; Analytic Geometry. By Professor J. W. A. Young: Limits and Series; College Algebra, Analytic Geometry. By Professor Kurt Laves: Plane Trigonometry; Spherical Trigonometry with Applications to Astronomy and Geodesy; Surveying; Practical Astronomy; Satellites.

THE LINCOLN SCHOOL.

Under the directorship of Dr. Otis W. Caldwell, Lincoln School, Teachers College, Columbia University, this school is making rapid strides toward accomplishing the purpose for which it was established. The appointment of Dr. Caldwell as its head meant success as this gentleman does not know the meaning of the word failure.

During the past summer there was brought together an array of some thirty speakers whose ability and reputation could not be surpassed, to discuss vital subjects of current topics in science. These lectures were given in the auditorium of the Horace Mann School. The results accomplished by this school are being studied by science educators the country over and undoubtedly the work being done here will be a pattern for science and mathematics teaching in the very near future.

FINDS FOSSIL FLOWER EMBEDDED IN ROCK.

Fossil flowers are such rare discoveries in the United States that the finding of a dogwood "flower" in a fragment of rock from the Glenrock coal field, Converse County, Wyo., is of interest. Dr. F. H. Knowlton, a paleobotanist of the United States Geological Survey, identified the fossil as a species of *Cornus*, a typical genus of the dogwood family.

There are some forty or fifty living species of the genus *Cornus*, which is widely distributed over three continents of the Northern Hemisphere and has one representative south of the Equator, a species in Peru. The leaves of more than twenty fossil species of *Cornus* have been found in North America, but the dogwood flower just identified, is the first one yet found in the United States. Species of dogwoods first appeared in the middle of the Cretaceous, the geologic period in which dinosaurs lived; in other words, the genus *Cornus* seems to have made its first appearance, probably more than four million years ago.