

in each successive issue, some of the information is brought up to date; a significant change noted this year is the suppression of the interest tables for $5\frac{1}{2}$ and 6 per cent., and the insertion of those for $1\frac{1}{2}$ and 2 per cent.

The summaries of progress in special lines which we are accustomed to expect deal this year with variable stars by M. G. Bigourdan and with the movements and deformations of the crust of the earth by M. Ch. Lallemand, the former in 116, and the latter in 57 pages. Both of these articles are illustrated by numerous figures and really amount to brief treatises from which it is easy to obtain a fair idea of the theorems, methods and results in the two subjects. Two brief obituary notices of M. Janssen by MM. Radau and Deslandres, and a full alphabetical index close the volume.

ERNEST W. BROWN.

NOTES.

THE twenty-fourth regular meeting of the Chicago Section of the AMERICAN MATHEMATICAL SOCIETY will be held at the University of Chicago on April 9-10.

THE Deutsche Mathematiker-Vereinigung now includes 725 members, of whom 60 are Americans. The Circolo Matematico di Palermo has a membership of 635, of whom 105 are Americans.

UNIVERSITY OF PARIS. The following mathematical courses, each two hours per week, are given in the second semester, beginning March 1:—By Professor E. PICARD: Certain developments in series occurring in analysis and mathematical physics.—By Professor E. GOURSAT: Differential equations.—By Professor P. PAINLEVÉ: General laws of motion of systems, analytic mechanics, hydrostatics and hydrodynamics.—By Professor P. APPELL: Elements of analysis and mechanics.—By Professor P. ANDOYER: Mathematical astronomy.—By Professor J. BOUSSINESQ: Thermodynamics and refrigeration.—By Professor G. KOENIGS: General theory of mechanisms.

Semiweekly conferences are held by Professors Raffy, Andoyer, and Servant.

The courses in the Ecole Normale are continuations of those of the first semester (see December BULLETIN, page 148).

UNIVERSITY OF MUNICH.—By Professor F. LINDEMANN: Analytic geometry of space, five hours; Definite integrals and Fourier series, four hours; Seminar, two hours.—By Professor A. VOSS: Integral calculus, five hours; Differential geometry of curved surfaces, II, three hours; Seminar, two hours.—By Professor A. PRINGSHEIM: Algebra, II, four hours; Applications of elliptic functions, three hours.—By Professor A. SOMMERFELD: Optics, four hours; Seminar, two hours.—By Professor H. BRUNN: Elements of higher mathematics for general students, three hours.—By Professor K. DOEHLEMANN: Descriptive geometry, II, with exercises, six hours; Geometric mechanics, with exercises, four hours.—By Dr. F. HARTOGS: Analytic functions of several variables, two hours.—By Dr. O. PERRON: Differential and integral calculus, with exercises, six hours.

UNIVERSITY OF STRASSBURG.—By Professor H. WEBER: Definite integrals and introduction to the theory of functions, four hours; Algebraic numbers, two hours; Seminar, two hours.—By Professor F. SCHUR: General theory of curves and surfaces, four hours; Geometry of movement, two hours; Seminar, two hours.—By Professor J. WELLSTEIN: Introduction to the theory of finite discrete groups, four hours; Riemann surfaces, two hours; Seminar, two hours.—By Professor H. E. TIMERDING: Analytic geometry of space, four hours; Introduction to higher analytic geometry of the plane, four hours; Axonometry and perspective, two hours.—By Professor P. EPSTEIN: Harmonic functions and Bessel functions, four hours.

The following graduate courses in mathematics are announced for the year 1909–1910.

PRINCETON UNIVERSITY. (Each course is three hours per week.)—By Professor H. B. FINE: Advanced algebra (first term).—By Professor H. D. THOMPSON: Coordinate geometry.—By Professor J. H. JEANS: Mechanics and kinematics.—By Professor L. P. EISENHART: Differential geometry.—By Professor O. VEBLEN: Projective geometry, I; Projective geometry, II; Theory of functions of real variables.—By Professor G. D. BIRKHOFF: Differential equations; Advanced calculus.—By Dr. E. SWIFT: Theory of functions of a complex variable.

PROFESSOR G. BAGNERA, of the University of Messina, has accepted the professorship of analysis at the University of Palermo.

PROFESSOR G. FUBINI, of the University of Genoa, has been appointed professor of mathematical analysis at the technical school at Turin.

DR. R. v. MISES has been appointed docent in mechanics at the technical school at Brünn.

DR. KRYGOWSKY, of the technical school at Lemberg, has been promoted to an associate professorship of mathematics.

PROFESSOR J. PLEMELJ, of the University of Czernowitz, has been promoted to a full professorship of mathematics.

PROFESSOR H. POINCARÉ, of the University of Paris, has been elected honorary member of the academy of sciences at Vienna.

DR. E. BUHL, of the University of Toulouse, has been promoted to a professorship of mathematics.

PROFESSOR M. DISTELI, of the technical school at Dresden, has accepted the professorship of mathematics in the technical school of Carlsruhe made vacant by the resignation of Professor F. SCHUR, who was called to the University of Strassburg.

PROFESSOR TH. REYE, professor emeritus of the University of Strassburg, has been decorated with the order of the red eagle of the second class with the oaken wreath.

PROFESSOR MAURICE LÉVY, of the Collège de France, has been made professor emeritus.

PROFESSOR E. LANDAU, of the University of Berlin, has accepted a professorship of mathematics at the University of Göttingen, as successor to the late Professor H. Minkowski.

DR. P. CARRUS, of the University of Besançon, has been promoted to an associate professorship of mathematics.

MR. D. D. LEIB has been appointed instructor in mathematics at Yale University.

PROFESSOR G. MORERA, of the University and technical school at Turin, died February 8, at the age of 53 years. He was a member of the academy of sciences of Turin, and of the royal academy dei Lincei.