FREYBERG (Dresden): Töpler's apparatus for illustrating the statics and dynamics of rigid bodies.

VON LOMMEL (Munich): On lines of magnetic force.

SCHAPIRA (Heidelberg): Iteration as the fundamental idea in mathematical operations.

FRICKE (Göttingen): On the moduli of a Riemann surface.

DOEHLEMANN (Munich): On the theory of the null-system.

BURKHARDT (Göttingen): On the theory of Cremona transformations.

SCHAPIRA (Heidelberg): On symmetric and alternating quadratic forms.   A. Z.

Proceedings of the American Association for the Advancement of Science for the forty-second meeting, held at Madison, Wis., August, 1893. Salem, 1894. 8vo. cxvi + 384 pp.

Besides Professor C. L. Doolittle's vice-presidential address to Section A on "Variations of latitude," this volume contains brief abstracts of a paper by Professor F. H. Loud, "A construction for the imaginary points and branches of algebraic loci," of a paper by Professor E. W. Hyde, "The screw as a unit in a Grassmannian system of the sixth order" (published in full in the *Annals of Mathematics,* vol. 8), and of a paper by Professor Mansfield Merriman, "On the possibility of the algebraic solution of the general equation of the fifth degree." Several other papers read before Section A are given only by title.   A. Z.

Le Livret de l'Étudiant de Paris. Publié sous les auspices du Conseil générale des Facultés. 1894–1895. Paris, Delalain Frères, 1894. 12mo. 158 pp.

A small volume bearing the above title has just been published by the General Council of the Faculties of Paris on behalf of those institutions which taken together are regarded as constituting the *Académie de Paris.* In the preface we read: "The General Council of the Faculties deems it useful to bring together the various information necessary for each student. . . . In giving to the students of Paris greater facilities for informing themselves as to both the rules to which they are subject and the means of study which are at their disposal, in showing them all the resources which the faculties and schools offer for higher intellectual culture, the publishers hope to contribute, on their part, to the rapidly-progressing development of the *University of Paris.*" The matters presented are: (1) programmes of the several faculties and the school of pharmacy; (2) announcements of other institutions of higher instruction; (3) academic regulations;

(4) addresses of professors; (5) students' societies; (6) index of courses; (7) index of regulations; (8) index of names. Among the courses announced by the Faculty of Science for the semester beginning November 12, 1894, are: Darboux, Theory of rectilinear congruences and of the deformation of surfaces,—Picard, Study of curves defined by differential equations. Investigation of linear differential equations, particularly from the point of view of the theory of continuous and discontinuous groups,—Appell, General laws of equilibrium and motion,—Tisserand, Theory of the motions of the satellites of Jupiter and Saturn,—Poincaré, Study of the theory of the Newtonian potential,—Boussinesq, Study of the equilibrium and motion of elastic solids and of the resistance, either statical or dynamical, of these bodies. Supplementary courses, including conferences upon subjects required for the *Agrégation des Sciences mathématiques,* are given by Messrs. Raffy, Koenigs, Andoyer, Puiseux, Painlevé, and others. T. S. F.

NOTES.

A REGULAR meeting of the AMERICAN MATHEMATICAL SOCIETY was held Saturday afternoon, November 24, at three o'clock, the President, Dr. McClintock, in the chair. Professor John H. Kleinheksel, of Hope College, Holland, Mich., and Mr. Henry Freeman Stecker, of the University of Wisconsin, Madison, Wis., having been duly nominated, and being recommended by the Council, were elected to membership. The following papers were presented :

(1) Mr. C. S. PEIRCE : "Rough notes on geometry. Constitution of real space."

(2) Professor E. HASTINGS MOORE : "The group of holoedric transformation into itself of a given group."

In the absence of Professor Moore, his paper was read by the Secretary. It appears in the present number of the BULLETIN, page 61. Mr. Vatslov A. Hlasko, who was present by invitation, exhibited and explained a model, which he had constructed, representing a three-dimensional projection of the regular figure of four dimensions bounded by six hundred tetrahedra.

WE record with regret the death, on November 8 last, of William Curns Lawrence Gorton, professor of mathematics and astronomy at the Woman's College of Baltimore.

DR. H. T. EDDY has accepted an appointment as professor