

INDEX.

- BÔCHER, M. The Fundamental Conceptions and Methods of Mathematics, 115.
- BOUTON, C. L. Note on Isothermal Curves and One-Parameter Groups of Conformal Transformations in the Plane, 369.
- BROMWICH, T. J. F. A. Remarks Concerning the Variation of the Length of a Curve, 547.
- COLE, F. N. Reports of Meetings of the American Mathematical Society: October Meeting, 111; Eleventh Annual Meeting, 231; February Meeting, 347; April Meeting, 461.
- COOLIDGE, J. L. The Opportunities for Mathematical Study in Italy, 9.
- DARBOUX, G. A Survey of the Development of Geometric Methods (translated by H. D. Thompson), 517.
- DICKSON, L. E. The Group of a Tactical Configuration, 177.
 — On the Class of the Substitutions of Various Linear Groups, 426.
 — A General Theorem on Algebraic Numbers, 482.
- EISENHART, L. P. On the Deformation of Surfaces of Translation, 486.
- FISKE, T. S. Mathematical Progress in America, 238.
- HASKELL, M. W. The Construction of Conics Under Given Conditions, 268.
 — See PICARD, E.
- HASKELL, M. W., and WHITE, H. S. The Eleventh Summer Meeting of the American Mathematical Society, 55.
- HILTEBEITEL, A. M. Note on a Problem in Mechanics, 432.
- HOLGATE, T. F. The December Meeting of the Chicago Section, 352.
- KASNER, E. The Present Problems of Geometry, 283.
 — Galileo and the Modern Concept of Infinity, 499.
- MILLER, G. A. Reports of Meetings of the San Francisco Section of the American Mathematical Society: October Meeting, 68; February Meeting, 399.
 — Addition to a Theorem Due to Frobenius, 6.
 — Extension of a Theorem Due to Sylow, 367.
 — The Groups of Order 2^m which Contain an Invariant Cyclic Subgroup of Order 2^{m-2} , 494.
- MOREHEAD, J. C. Note on Fermat's Numbers, 543.
- PICARD, E. On the Development of Mathematical Analysis and its Relation to Certain Other Sciences (translated by M. W. Haskell), 404.
- PIERPONT, J. The History of Mathematics in the Nineteenth Century, 136.
- RIETZ, H. L. Simply Transitive Primitive Groups which are Simple Groups, 545.
- SMITH, B. On the Deformation of Surfaces of Translation, 187.
- SNYDER, V. On Developable and Tubular Surfaces having Spherical Lines of Curvature, 1.
 — On the Quintic Scroll having a Tacnodal or Oscnodal Conic, 182.
- STRINGHAM, I. A Geometric Construction for Quaternion Products, 437.

- THOMPSON, H. D. See DARBOUX, G.
 TYLER, H. W. The International Congress of Mathematicians at Heidelberg, 191.
 WELD, L. G. The Fifty-fourth Annual Meeting of the American Association for the Advancement of Science, 315.
 WHITE, H. S. Mathematics at the St. Louis Congress, September 20, 22, and 24, 1904, 358.
 — See HASKELL, M. W.
 WILCZYNSKI, E. J. On Self-Dual Scrolls, 8.
 WILSON, E. B. The Heidelberg Congress: Sectional Meetings, 205, 247.
 WILSON, R. E. The Breslau Meeting of the Deutsche Mathematiker-Vereinigung, 263.
 WRIGHT, J. E. Application of the Theory of Continuous Groups to a Certain Differential Equation, 180.
 YOUNG, J. W. On the Use of Hypercomplex Numbers in Certain Problems of the Modular Group, 363.
 — The April Meeting of the Chicago Section, 472.

REVIEWS.

- Abraham, M., Einführung in die Maxwell'sche Theorie der Electricität, von A. Föppl (zweite Auflage), E. B. WILSON, 383.
 Arendt, G., Dirichlet's Vorlesungen über die Lehre von den einfachen und mehrfachen bestimmten Integralen, V. SNYDER, 371.
 Annuaire Astronomique pour 1905 (Royal Belgian Observatory), E. W. BROWN, 164.
 Annuaire pour l'An 1905, publié par le Bureau des Longitudes, E. W. BROWN, 445.
 Cadenat, A. See Russell, B.
 Cajori, F., Theory of Equations, L. E. DICKSON, 163.
 Dirichlet, G. L. See Arendt, G.
 Fischer, V., Vektordifferentiation und Vektorintegration, E. B. WILSON, 17.
 Föppl, A. See Abraham, M.
 Gibbs, J. W., Diagrammes et Surfaces thermodynamiques, traduction de G. Roy, W. F. DURAND, 446.
 Halsted, G. B., Rational Geometry, S. C. DAVISSON, 330.
 Henrici, O., and Turner, G., Vectors and Rotors, with Applications, E. B. WILSON, 17.
 Hilton, H., Mathematical Crystallography and the Theory of Groups of Movements, R. P. BAKER, 379.
 Humbert, G., Cours d'Analyse, E. R. HEDRICK, 319.
 Joly, C. J. A Manual of Quaternions, J. B. SHAW, 548.
 Kelland and Tait, P. G. See Knott, C. G.
 Knott, C. G., Kelland and Tait's Introduction to Quaternions, third edition E. B. WILSON, 17.
 Krazer, A., Lehrbuch der Thetafunktionen, J. I. HUTCHINSON, 375.
 Lechales, G., Introduction à la Géométrie Générale, O. VEULEN, 439.
 Loewy, A., Versicherungsmathematik, S. EPSTEEN, 21.
 Meyer, R. See Zeuthen, H. G.
 Murray, D. A., First Course in Infinitesimal Analysis, W. B. FITE, 442.

- Netto, E., *Elementare Algebra*, J. H. TANNER, 441.
 Rost G., *Theorie der Riemannschen Thetafunktion*, J. I. HUTCHINSON, 375.
 Roy, G. See Gibbs, J. W.
 Russell, B., *The Principles of Mathematics*. E. B. WILSON, 74.
 — *Essai sur les Fondements de la Géométrie*, traduction par A. Cadenat.
 E. B. WILSON, 74.
 Séguier, J. A. de, *Eléments de la Théorie des Groupes Abstraites*, L. E. DICKSON, 159.
 Seliwanoff, D., *Lehrbuch der Differenzenrechnung*, S. EPSTEEN, 25.
 Tanner, J. H., *Elementary Algebra*, J. PIERPONT, 444.
 Tannery, J. *Introduction à la Théorie des Fonctions d'une Variable*, Tome I, L. E. DICKSON, 557.
 Tehebychef, P. L., *Theory of Congruences*, A. MARKOFF, 337.
 Turner, G. See Henrici, O.
 Zeuthen, H. G. *Geschichte der Mathematik in XVI. und XVII. Jahrhundert*. (Deutsche Ausgabe von R. Meyer), D. E. SMITH, 554.

Errata, 559.

New Publications, 39, 102, 170, 223, 278, 341, 395, 456, 511, 563.

Notes, 27, 93, 164, 217, 274, 337, 387, 447, 502, 560.

Papers Read before the Society and Subsequently Published, Fourteenth Annual List of, 571.

Index, 578.

NOTES AND OTHER ITEMS.

Academies, Associations, Congresses, and Societies :

American Mathematical Society : Annual Meeting, 164 ; Annual Register, 217 ; Boston Colloquium Lectures, 387 ; Bulletin, General Index, 27 ; Chicago Section, 165, 387 ; Election of Officers, 232 ; Twelfth Summer Meeting, 447 ; Library, 217 ; New Members Admitted, 55, 111, 231, 347, 461 ; Presidential Address, 164, 217 ; Reports of Officers, 232, San Francisco Section, 27, 274, 560 ; Transactions, 27, 165, 274, 348, 447.

Belgian Academy, 36 ; British Mathematical Association, 388 ; *Circolo Matematico di Palermo*, 167 ; Denmark Academy, 560 ; Dutch Academy, 389 ; Geneva Congress of Philosophy 29, 95 ; German Mathematical Society, 96, 219, 448 ; Heidelberg Congress, 29, 95 ; Institute of France, 502 ; Kazan Physico-Mathematical Society, 36 ; London Mathematical Society, 218, 275, 337, 388, 448, 502, 560 ; Madrid Academy, 338 ; Naples Royal Society, 454 ; National Academy, 165, 502 ; National Educational Association, 28, 449 ; Paris Academy, 276, 337 ; Royal Society, 220, 502 ; Society for Study of History of Sciences, 29 ; St. Petersburg Academy, 220 ; Turin Academy, 560 ; Würtemberg Mathematical-Physical Society, 275.

Associations for the Advancement of Science : American, 166, 275 ; British 28, 93, 388 ; French, 94.

Associations of Teachers of Mathematics : Asbury Park Conference, 449 ; California, 275 ; Central, 217 ; Chicago Conference, 218 ; Kansas, 166 ; Middle States and Maryland, 166, 217, 388, 449 ; Missouri, 28, 276, 449 ; New England, 166 ; Ohio, 276, 448.

Books, Notices of New, 96, 97, 166, 167, 219, 339, 387, 389, 449, 450, 502.

Catalogues of Books and Models, 38, 97, 170, 339, 340, 450, 455, 510.

Doctorates in Mathematics, 28, 165, 393.

Journals :

American Journal of Mathematics, 27, 93, 274, 448 ; Annals of Mathematics, 27, 93, 274, 448. Crelle, 393. L'Enseignement Mathématique, 95 ; Mathematisch-Naturwissenschaftliche Blätter, 339 ; Proceedings of the Royal Society, 502 ; School Science and Mathematics, 275 ; Transactions of the American Mathematical Society, 27, 165, 274, 447.

Papers and Communications Presented to the Society, Authors :

Allen, R. B., 348.
 Ames, L. D., 56, 348.
 Blichfeldt, H. F., 69, 399, 399.
 Bliss, G. A., 56, 473, 473.
 Böcher, M., 56.
 Bouton, C. L., 348.
 Bromwich, T. J. Pa., 57.
 Brown, E. W., 112, 348.
 Bussey, W. H., 473.
 Coble, A. B., 232, 233.
 Curtiss, D. R., 56, 56, 462.
 Dickson, L. E., 57, 57, 233, 233, 353, 353, 353, 462, 473, 473, 474.
 Eisenhart, L. P., 348, 462.
 Epstein, S., 353, 472.
 Escott, E. B., 56.
 Fiske, T. S., 233.
 Fite, W. B., 57.
 Fréchet, M., 57, 233.
 Glenn, O. E., 348.
 Graber, M. E., 473.
 Hedrick, E. R., 57, 57.
 Hiltebeitel, A. M., 348.
 Hoskins, L. M., 69.
 Huntington, E. V., 57, 233, 233.
 Ingold, L., 57.
 Kasner, E., 112, 233, 462, 462.
 Lehmer, D. N., 69.
 Lennes, N. J., 353, 353.
 Leuschner, A. O., 399.
 Loewy, A., 473.
 Lovett, E. O., 462.
 McClenon, R. B., 462.
 Macaulay, F. S., 57.
 MacLagan-Wedderburn, J., 353, 473, 473.
 MacMahon, P. A., 69.
 Manning, W. A., 399.
 Maschke, H., 473, 473.
 Mason, M., 112, 232, 462.
 Miller, G. A., 57, 69, 112, 399.
 Moore, E. H., 233.
 Moore, R. L., 472, 473.
 Morehead, J. C., 112, 462.
 Moritz, R. E., 399.
 Morley, F., 233.
 Owens, F. W., 473.
 Pierpont, J., 348, 462, 462.
 Poincaré, H., 57.
 Porter, M. B., 462, 462.
 Putnam, T. M., 69.
 Ragsdale, V., 462.
 Rietz, H. L., 473.
 Royce, J., 462.
 Schottenfels, I. M., 57, 462, 462.
 Schultze, A., 461.
 Scott, C. A., 348.
 See, T. J. J., 399.
 Sharpe, F. R., 348.
 Shaw, J. B., 57, 473, 473.
 Sisam, C. H., 233.
 Smith, A. W., 348.
 Smith, B., 233, 353.
 Snyder, V., 112, 232.
 Stringham, I., 399.
 Taber, H., 112.
 Underhill, A. L., 473.
 Vandiver, H. S., 57.
 Van Vleck, E. B., 112, 462.
 Veblen, O., 57, 353, 473, 473, 473, 474.
 White, H. S., 57, 353.
 Whitney, A. W., 399.
 Wilczynski, E. J., 69, 399, 462.
 Wilson, A. H., 353.
 Wilson, E. B., 462.
 Wilson, N. R., 473.
 Wright, J. E., 233, 462, 462.
 Young, A. E., 353.
 Young, J. W., 57.

Personal Notes :

Adrain, R., 221 ; Allman, G. J., 38 ; Andereg, F., 170 ; André, C. H., 94 ; André, D., 276.
 Baker, R. P., 339 ; Barbarin, P., 36, 394 ; Bartlett, D. P., 509 ; Barton, J. H., 101 ; Bateman, H., 389 ; Bjercknes, V. F., 509 ; Blake, E. M., 101 ; Blichfeldt, H. F., 563 ; Bliss, G. A., 562 ; Boehm, K., 277 ; Borel, E., 276, 394 ; Bowser, E. A., 101 ; Bradshaw, J. W., 37 ; Braunmühl, A. von, 340 ; Brendel, M., 99 ; Bricard, L., 276 ; Brown, E., 562 ; Brown, E. W., 455 ; Bunia-kowsky, W. J., 339 ; Burnside, W., 220 ; Bussey, W. H., 563.

- Cairns, W. D., 37, 170, 563; Campbell, J. E., 562; Camp, B. H., 221; Cantor, G., 36, 220; Cantor, M., 454; Carathéodory, C., 454; Carruth, W. H., 509; Cartan, E., 168; Champreux, A. J., 101; Chizzoni, F., 222; Cole, F. N., 170; Colpitts, E. C., 509; Converse, H. C., 101; Cotton, A., 168; Cranz, C., 36.
- Darwin, G. H., 28, 388; Davis, N. F., 166; Davis, W. W., 101; Davidson, S. C., 510; Dawson, M. M., 502; Dehn, M., 562; De Motte, H. C., 340; Dingeldey, F., 100; Dirichlet, G. L., 393; Disteli, M., 509; Dodd, E. L., 101; Dommer, A., 169; Dowling, L. W., 455; Drach, J., 168.
- Eggert, O., 169; Eichelberger, W. S., 275; Eisenlohr, F., 38; Ely, A. M., 222; Esty, T. C., 170, 394; Esty, W. C., 394; Euer, B. C., 509; Evans, H. B., 169; Everett, J. D., 38; Exner, F., 37; Exner, K. F. J., 277.
- Findlay, W., 562; Fine, H. B., 217; Fiske, T. S., 164, 217, 217; Fite, W. B., 563; Föppl, A., 340; Ford, W. B., 563; Forsyth, A. R., 93, 218, 388; Freeman, H. A., 38; Fricke, R., 99; Fürtwängler, P., 277.
- Gale, A. S., 562; Giard, N., 94; Gibson, G. A., 455; Gill, D., 28; Glenn, O. E., 563; Gordan, P., 340; Grace, J. H., 218; Grant, E. D., 170; Grassmann, H., 100; Gravatt, T. E., 101; Grünwald, J., 221; Guarducci, F., 100; Gummere, H. V., 101; Gundelfinger, S., 221; Gundersen, C., 37; Gutzmer, A., 96, 219.
- Hahn, L., 562; Hall, A., 101; Hallett, G. H., 37; Halsted, G. B., 394; Hart, H. F., 38; Hauck, G., 394; Havemeyer, C., 38; Heffter, L., 100; Herglotz, G., 100; Hilbert, D., 36, 340; Hill, G. W., 220; Hill, R. V., 37; Hoffmann, J. C. V., 394; Hogan, J. R., 340; Holden, C. A., 37; Holgate, T. F., 37; Howland, L. A., 509; Hudson, R. W. H. T., 101, 278; Huntington, E. V., 562.
- Jahnke, E., 393; James, J. N., 37; Jarolimek, V., 454; Jeans, J. H., 221; Joly, H., 169.
- Karpinski, L. C., 37; Kasner, E., 455; Keyser, C. J., 37, 221; Kiepert, L., 340; Klein, F., 36, 219; Kneser, A., 221; Kortum, H., 170; Kosso-nogof, I. L., 36; Kowalewski, G., 220.
- Laisant, C. A., 94, 169; Lalande, J. J., 454; Lamb, H., 28; Landré, C. L., 510; Landsberg, G., 36, 220; Lebon, E., 509; Lecornu, L., 169; Legras, G., 166; Lehmann-Filhés, R., 454; Lehmer, D. N., 101; Leitzmann, W., 339; Lemoine, E., 36, 276; Lerch, M., 394; Liebmann, H., 277; Lilley, G., 170; Lindemann, F., 100, 508; Lockyer, N., 277; London, F., 220; Lorentz, H. A., 509, 562; Love, A. E. H., 218; Lovett, E. O., 394; Luckey, J. R., 170; Luther, F. S., 169.
- McKay, A. C., 562; McKinney, T. E., 449; Macdonald, H. M., 169; Macfarlane, A., 394; Macmahon, P. A., 28; Mangoldt, H. von, 37; Mansion, P., 169; Marrack, P. E., 389; Martin, E. N., 27; Mason, J. W., 278; Mathews, G. B., 388, 562; Meyer, O. E., 100; Meyer, W. F., 340, 454; Miller, B. J., 455; Miller, G. A., 275; Moore, E. H., 218; Moritz, R. E., 37; Morley, R. K., 170; Morrison, F. M., 563; Murray, D., 455; Müth, G., 35; Myers, G. W., 275.
- Neumann, E., 340; Newcomb, S., 169; Newkirk, B. L., 101; Newson, H. B., 166, 275; Nichols, T. F., 37; Noether, M., 168.
- Osgood, W. F., 36; Ott, K. E. von, 170.
- Painlevé, P., 394; Panek, A., 221; Pascal, E., 454; Peano, G., 169; Pexider, J. V., 509; Pieri, M., 36; Pirie, G., 38; Poincaré, H., 168, 169; Prasad, G., 101; Pringsheim, A., 100; Prochazka, F., 340; Pupin, M. I., 502; Puzyrna, J., 340.
- Radelfinger, F. G., 38; Raffy, L., 168; Ranum, A., 37; Rayleigh, Lord, 36, 277; Richard, G., 277; Richardson, R. G. D., 222; Rockwood, C. G., 455; Roeber, W. H., 455; Rohn, K., 100; Roth, F., 100, 393; Rothrock, D. A., 510; Runge, C., 36; Russjan, C., 277.
- Salmon, G., 36; Sarrau, E., 38; Saugrain, G., 94; Saurel, P. L., 278; Scheffers, G., 221; Schellbach, K., 339; Schepp, A., 563; Schilling, F.,

37, 454, 509; Schiaparelli, G. V., 339; Schmidt, K., 170; Schoenflies, A., 454; Schreber, K., 100; Schultze, A., 170, 217, 275; Schur, F., 100; Segre, C., 168; Servant, M., 276; Sharpe, R. F., 340; Shoop, C. F., 101; Sim, J. R., 278; Sinclair, M. E., 37; Sisam, C. H., 37; Skinner, J. J., 37; Slonimski, C. S., 38; Smith, D. E., 97, 449, 562; Sommer, J., 100; Stäckel, P., 277, 393, 448; Stebbins, J., 169; Stöchl, K., 454; Stokes, G. G., 36; Study, E. 36; Sylow, L., 100.

Taber, H., 563; Tanner, J. H., 509; Tannery, J., 100; Tannery, P., 95, 222; Tucker, R., 394.

Vahlen, K. T., 221; Valentin, J., 37; Van der Vyver, H., 562; Van Vleck, E. B., 455, 509; Van Vleck, J. M., 509; Vega, G. von, 220; Vieille, P., 340; Volterra, V., 28; Voronetz, P. V., 36.

Waldo, C. A., 275; Wangerin, A., 100; Warren, L., 510; Weber, M., 221; Weiss, W., 38; Weld, L. G., 166; Wellstein, J., 36; Westfall, D. W. A., 563; Westfall, J. V., 509; Weston, C. P., 169; White, H. S., 562; Whitford, E., 340; Whitney, A. W., 101; Whittaker, E. T., 562; Willard, H. R., 170; Wilson, A. H., 169; Woodward, C. M., 275; Woodward, R. S., 221, 394; Woodward, S. M., 101; Wright, T. W., 510.

Young, A., 169; Young, C. A., 394.

Zaremba, S., 562; Zgismondy, K., 454; Ziwet, A., 166.

Prizes :

Adams, 388; Belgian Academy, 36; Breslau Philosophical Faculty, 35; Denmark Academy, 560; Dutch Academy, 389; Göttingen Philosophical Faculty, 35; Guccia Medal, 167; Lobachevsky, 36; Madrid Academy, 338; Naples Society, 454; Nobel, 277; Paris Academy, 276, 337; Royal Society, 220; Smith, 389; St. Petersburg Academy, 220; Turin Academy, 560.

Universities and Technical Schools :

Basel, 453.	Johns Hopkins, 561.
Berlin, 97, 339, 389.	Kiel, 33, 392.
Bern, 390.	Koenigsberg, 98.
Bonn, 98, 390.	Lausanne, 453.
Breslau, 32, 35, 390.	Leipzig, 33, 392.
Brown, 561.	Marburg, 34.
Bryn Mawr, 503.	Michigan, 29, 505.
California, 503.	Minnesota, 561.
Cambridge, 30.	Missouri, 338, 505.
Chicago, 503, 561.	Munich, 34, 392.
Columbia, 503, 509.	Münster, 34, 452.
Copenhagen, 507.	Nebraska, 506.
Cornell, 504.	Neuchâtel, 453.
Czernowitz, 99, 507.	Ohio, 30.
Erlangen, 32.	Oxford, 31, 277, 451.
Freiburg, 32, 391.	Paris, 167, 219, 393.
Geneva, 507.	Pennsylvania, 506.
Genoa, 99.	Prague, 99, 508.
Giessen, 32, 452.	Rostock, 34, 452.
Göttingen, 35, 339.	Stockholm, 35.
Graz, 99, 508.	Strassburg, 98, 452.
Greifswald, 32, 452.	Syracuse, 506.
Halle, 32, 391.	Tübingen, 34, 453.
Harvard, 450.	Vienna, 99, 508.
Heidelberg, 33, 391.	Virginia, 561.
Illinois, 504.	Wisconsin, 507.
Indiana, 505.	Würzburg, 35, 393.
Innsbruck, 35, 508.	Yale, 451.
Iowa, 505.	Zurich, 453.
Jena, 33, 391.	