

on mathematical questions connected with Röntgen rays and kindred phenomena.

All business, including the election of new members, was postponed until the next meeting of the Society.

Nature states that on September 13, a monument to Lobachevsky, erected at Kazan, in a square which bears the name of the celebrated geometer, was unveiled in the presence of various dignitaries including members of the University and the local Physical and Mathematical Society. Appropriate addresses were delivered by Professor SUVÒROV and by Professor VASÌLIEV.

UNIVERSITY OF GÖTTINGEN. The mathematical courses announced for the winter semester are the following: By Professor SCHERING: Potential function.—By Professor KLEIN: Integral calculus; Automorphic functions.—By Professor SCHUR: Applications of the method of least squares.—By Professor HILBERT: Theory of functions of a complex variable; Theory of algebraic equations.—By Professor SCHOENFLIES: Projective geometry.—By Professor BURKHARDT: Introduction to a mathematical treatment of the natural sciences.—By Dr. BOHLMANN: Mathematical principles underlying life insurance; Theory of probabilities.—By Dr. SOMMERFELD: Partial differential equations arising in mathematical physics.

NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

- EUCLIDES. Opera omnia, ediderunt I. L. Heiberg et H. Menge. (In 12 voluminibus.) Vol. VI: Data, cum commentario Marini et scholiis antiquis, edidit H. Menge. Leipzig, Teubner, 1896. 8vo. 6 and 336 pp. Mk. 5.00
- GOEBEL (K.). Die Zahl und das Unendlichkleine. Leipzig, Fock, 1896. 8vo. 47 pp. Mk. 1.20
- GOTSCHO (L.). Miscellen aus der Theorie der Kurven und Flächen zweiter Ordnung unter Anwendung der Methode des Unendlichgroßen. [Diss.] Freiburg, 1896. 8vo. 61 pp., 2 plates.
- HEIBERG (I. L.). See EUCLIDES.
- MARINUS. See EUCLIDES.
- MENGE (H.). See EUCLIDES.
- SPELTA (C.). Sull' integrazione dei sistemi di equazioni differenziali simultanee di qualunque ordine e grado. Nota II. Genova, Ciminago, 1896. 4to. 6 pp.

- TRESSE (A.). Détermination des invariants ponctuels de l'équation différentielle ordinaire du second ordre $y'' = w(x, y, y')$. (Preisschrift der Jablonowski'schen Gesellschaft.) Leipzig, 1896. 8vo. 87 pp. Mk. 6.00
- VEGA (G.). Thesaurus logarithmorum completus, ex Arithmetica logarithmica et e Trigonometria artificiali A. Vlacci collectus, plurimis erroribus purgatus, in novum ordinem reductus. (Vollständige Sammlung grösserer logarithmisch-trigonometrischer Tafeln.) Lipsiae, 1794. Riproduzione fotozincografica dell' Istituto geografico militare. Firenze, 1896. 4to. 3 and 29 and 684 pp. Fr. 30.00
- VIANELLO, (V.). Luca Paciolo nella storia della ragioneria ; con documenti inediti. Messina, 1896. 8vo. 174 pp. Fr. 5.00
- VLACK (A.). See VEGA (G.).

II. ELEMENTARY MATHEMATICS.

- CAJORI (F.). A history of elementary mathematics. With hints on methods of teaching. New York, Macmillan, 1896. 12mo. 8 and 304 pp. Cloth. \$1.50
- CUSACK'S Algebra. Part I : Elementary. City of London Book Depôt, 1896. 8vo. 266 pp. 2s. 6d.
- GILLET (J. A.). Euclidean geometry. New York and London, Holt, 1896. 12mo. 8 and 436 pp. 6s.
- GOOD (T. W.). Science and art of geometry. Section II for examination in first stage, solid geometry of the science and art department. 3d edition. London, Gill, 1896. 8vo. 192 pp. 1s. 4d.
- GUILMIN (A.). Algèbre élémentaire (No. 2), à l'usage des classes de lettres et des classes d'enseignement primaire supérieur, renfermant un très-grand nombre d'exercices de calcul algébrique et de questions usuelles de tout genre. 19e édition, corrigée et augmentée. Paris, Berlin, 1896. 12mo. 12 and 200 pp. Fr. 2.00
- KLEINSCHMIDT (E.). Leitfaden der Geometrie und des geometrischen Zeichnens für Knaben-Bürgerschulen. Mit über 600 Übungsaufgaben. Wien, Hölder, 1896. 8vo. 2 and 218 pp. Mk. 2.60
- LOCK (J. B.). Trigonometry for beginners. Revised and enlarged for the use of American schools by J. A. Miller. With "Tables, logarithmic and trigonometric, calculated to five places of decimals." Arranged by F. L. Sevenoak. New York, Macmillan, 1896. 8vo. 7 and 147 pp.; 9 and 63 pp. Cloth. \$1.10
- MILLER (J. A.). See LOCK (J. B.).
- RAWLEY (J. S.). Practical plane and solid geometry, scales, curves and pattern drawing. 16th edition, revised. London, Simpkin, 1896. 8vo. 2s.
- SCHLOTTERBECK (B.). Rechenvorteile ; eine leichtfassliche Anleitung in Beispielen zum Schnellrechnen. 3te Auflage. Langensalza, Schulbuchhandlung, 1896. 16mo. 80 pp. Boards. Mk. 0.60
- SEVENOAK (F. L.). See LOCK (J. B.).
- THOMPSON (H. D.). Elementary solid geometry and mensuration. New York, Macmillan, 1896. 12mo. 11 and 199 pp. Cloth. \$1.10

III. APPLIED MATHEMATICS.

- BAILLAUD (B.).** Cours d'astronomie à l'usage des étudiants des facultés des sciences. (En 2 volumes.) Partie II: Astronomie sphérique; mouvements dans le système solaire; éléments géographiques; éclipses; astronomie moderne. Paris, Gauthier-Villars, 1896. 8vo. Fr. 15.00
- BAISCH.** Eine Erweiterung des Satzes vom Reversionspendel. [Progr.] Heilbronn, 1896. 4to. 17 pp.
- BALL (R. S.).** The elements of astronomy. New edition, revised. London, Longmans, 1896. (Text-books of science.) 12mo. 484 pp. 6s. 6d.
- BOWSER (W. A.).** Friendly Societies' valuation and other tables, deduced from the sickness and mortality experience of the Manchester Unity of Odd Fellows (1866-70), combined with the mortality of the English life-table (No. 3) at ages 75 and upwards. London, 1896. 8vo. Cloth. 21 s.
- DIKSHIT (S. B.).** See **SEWELL (R.)**.
- EBSEN (J.).** Azimuth-Tabellen, enthaltend die wahren Richtungen der Sonne für Intervalle von 10 Zeitminuten zwischen den Breitenparallelen von 70° Nord bis 70° Süd. Hamburg, 1896. 8vo. 8 and 141 pp. Cloth. Mk. 7.50.
- FLAMANT (A.).** Stabilité des constructions; résistance des matériaux. 2e édition, revue et augmentée. (Encyclopédie des travaux publics.) Paris, Baudry, 1896. 8vo. 482 pp.
- FRANKLIN (W. S.).** See **NICHOLS (E. L.)**.
- GEORGIÉVSKY (P.).** Nouvelle théorie sur l'origine des revenus nets. Berlin, 1896. 8vo. 22 pp. Mk. 0.80.
- JACKSON (D. C.), and JACKSON (J. P.).** Alternating currents and alternating current machinery, being Vol. II of the text-book on electromagnetism and the construction of dynamos. New York, Macmillan, 1896. 12mo. 17 and 729 pp. Cloth. \$3.50
- KENRICK (F. B.).** Die Potentialsprünge zwischen Gasen und Flüssigkeiten. [Diss.] Leipzig, 1896. 8vo. 34 pp.
- LODGE (A.).** See **LODGE (O. J.)**.
- LODGE (O. J.).** Elementary mechanics. New edition, revised by the author and A. Lodge. London, Chambers, 1896. 8vo. 308 pp. 4s. 6d.
- LUEGER (O.).** Lexikon der gesamten Technik und ihrer Hilfswissenschaften. Herausgegeben im Verein mit Fachgenossen. (In circa 5 Bänden.) Vol. III. Stuttgart, Deutsche Verlagsanstalt, 1896. 8vo. 6 and 800 pp. Mk. 30.00
- MANGON (E.).** Le courant électrique différentiel. Paris, Baudry, 1896. 8vo. 61 pp.
- MATHY (E.).** Calcul des composantes de l'attraction d'un ellipsoïde homogène sur un point extérieur. Gand, 1896. 8vo. 39 pp. Fr. 1.50
- MEISSNER (G.).** Hydraulik. 2te Auflage. Vol. II. Jena, Costenoble, 1896. Mk. 21.00

- MEYER (M.). Ueber Combinationstöne und einige hierzu in Beziehung stehende akustische Erscheinungen. [Diss.] Berlin, 1896. 8vo. 55 pp. Mk. 1.80
- NICHOLS (E. L.) and FRANKLIN (W. S.). The elements of physics. A college text-book. (In 3 vols.) Vol. II: Electricity and magnetism. New York, Macmillan, 1896. 8vo. 9 and 272 pp. Cloth. \$1.50
- OCAGNE (M. D'). Application générale de la nomographie au calcul des profils de remblai et déblai, avec une instruction pratique pour la construction et le mode d'emploi des abaques à points isoplèthes. Paris, Dunod et Vicq, 1896. 8vo. 80 pp.
- PERNET (J.). Thermometrie. (Handbuch der Physik.) Breslau, Trendt, 1896. 8vo. 40 pp. Mk. 2.00
- POHLHAUSEN (A.). Berechnung, Construction und Anlage der Transmissions-Dampfmaschinen. Lehr- und Handbuch für Techniker und Ingenieure. (In circa 25 Lieferungen.) Lieferung I. Mittweida, Polytechnische Buchhandlung, 1896. 4to. pp. 1-16, 2 plates. Mk. 1.00
- RIEMANN (L.). Populäre Darstellung der Akustik in Beziehung zur Musik. Im Anschluss an Helmholtz's "Lehre von den Tonempfindungen." Braunschweig, 1896. 8vo. 157 pp. Mk. 3.00
- RITTER (A.). Lehrbuch der technischen Mechanik. 7te, neubearbeitete Auflage. Leipzig, Baumgärtner, 1896. 8vo. 15 and 793 pp. Mk. 18.00
- SCHRAM (R.). See SEWELL (R.).
- SEWELL (R.) and DIKSHIT (S. B.). The Indian calendar. With tables for the conversion of Hindu and Mohammedan into A. D. dates and *vice versa*, and tables of eclipses visible in India by R. Schram. London, 1896. 4to. 12 and 169 and 136 pp. Cloth. 32s.
- TETMAJER (L.). Die Gesetze der Knickungsfestigkeit der technisch wichtigen Baustoffe. Zürich, 1896. 8vo. 80 pp., 4 plates. Mk. 4.00
- TILLO (A. DE). Tables fondamentales du magnétisme terrestre. Répartition, isanomales, éphémérides, variation séculaire, magnétisme moyen. St. Pétersbourg, 1896. 4to. 91 pp., 16 colored plates. Mk. 18.00
- VOLKMANN (P.). Erkenntnistheoretische Grundzüge der Naturwissenschaften und ihre Beziehungen zum Geistesleben der Gegenwart. Allgemein wissenschaftliche Vorträge. Leipzig, Teubner, 1896. 8vo. 12 and 181 pp. Mk. 6.00
- VOLTERRA (V.). Lezioni di meccanica. Prime nozioni di cinematica. Livorno, 1896. 8vo. 100 pp. Fr. 2.00
- WINKELMANN (A.). Handbuch der Physik. Herausgegeben unter Mitwirkung von F. Auerbach, F. Braun, S. Czapski, H. Exner und Anderen. Vol. II. Abteilung 2: Wärme. Breslau, Trendt, 1896. 8vo. 6 and 887 and 55 pp. (index to the whole work). Mk. 28.00
- ZELBR (K.). Die Bahnbestimmung der Planeten und Kometen. (Handwörterbuch der Astronomie.) Breslau, 1896. 8vo. 125 pp. Mk. 5.00
- ZIMMERMANN (H.). Die Schwingungen eines Trägers mit bewegter Last. Berlin Ernst, 1896. 8vo. 7 and 46 pp., 4 plates. Mk. 6.00