Warehouse and Collecting Depot, Augustus Square, London, Eng. No. LII. Animi cultus quasi quidam humanita tis cibus. MARCH, 1896. Anon after he set vp a great scole at Caunterbury of al maner of Seyences, as rhetoric, logyck, phylosophy, mathesy, astrologi, geometrye, arithmeticke and musike. - JOHN BALL in his " Actes of English Votaryes," 1546. The mathematicks and the metaphysicks, Fall to them, as you find your stomach serves you. - Taming of the Shrew. Bibliotheca Miscellanea Mathematica CATALOGUE OF AN EXTENSIVE COLLECTION OF BOOKS LOGIC AND METAPHYSICS, MECHANICS, ENGINEERING, ARITHMETIC AND ALGEBRA, AND GENERAL MATHEMATICAL SCIENCE ON SALE AT THE LOW PRICES AFFIXED BY JOHN BRITNELL 280 YONGE STREET, TORONTO, CANADA. Forthcoming Catalogues will comprise Farming and Country Life, Poetry and the Drama, Medicine, Science and Divinity. THE CARRIAGE OF ORDERS amounting to \$30 or upwards in value will be forwarded prepaid to any railway station in the U.S. or Canada. All books printed previous to 1876 are duty free to the U.S. Curators of Public Libraries and Seminaries of Learning, when ordering dutiable books will please enclose affidavit for FREE ENTRY, and a considerable saving in time and expense will be effected. FRIENDS WHO LOVE GOOD OLD E00KS and who appreciate our methods of business will kindly aid in the circulation of our Catalogue, as THIS KIND OF BREAD IS IMPERISHABLE AND WHEN CAST UPON THE WATERS OF TIME WILL BE SEEN AFTER MANY DAYS. ARCHITECTURE, MECHANICS, AND ENGINEERING, ETC., RERGUSSON'S (Jas.) DC.L., F.R.S., HISTORY OF ARCHI-TECTURE, in ALL COUNTRIES, from the earliest times to the present day, numerous illustrations, 2 vols, 8vo, half morocco, top edge gilt, 4.75, New York, 1887. Fergusson's (Jas.) HISTORY of the MODERN STYLES of ARCHI-TECTURE, the third and BEST ENGLISH EDITION, revised by ROBERT KERR, with many hundred illustrations, 10.25, London, John Murray, 1891. Fergusson's (Jas.) D.C.L., F.R.S., HISTORY of EASTERN and INDIAN ARCHITECTURE, numerous illustrations, 756 pp, 8vo, half morocco, top edge gilt, 6.75, John Murray, 1891. Loudon's (J. C.) ENCYCLOPÆDIA OF COTTAGE, FARM and VILLA ARCHITECTURE, and FURNITURE, new edition, with about 2,000 illustrations and a glossarial index, 1,317 pp, thick 8vo, substantially bound in green calf gilt, marbled edges, 2.25, Longman's, 1846. A CAPITAL VOLUME, with hundreds of designs for dwellings, from the villa to the cottage and farm, farmeries, country inns, parochial schools, including the fittings up, fixtures and furniture, offices, garden scenery, including gothic and other styles of architecture. Architect (The) A WEEKLY ILLUSTRATED JOURNAL of ART, CIVIL ENGINEERING and BUILDING, with numerous full double page illustrations, comprising plans and elevations, beautiful interiors, etc, from Vol 1, 1869, to Vol 6, 1871, 6 vols, folio, cloth, a scarce in addition to its being an interesting lot. 5.25.

he Cox

2 thick

N to

for the

of the

roposed

2.5

St

ment

ITS OF

884

d close

n ron

on. It

ogress,

oti er

LOGIC, METAPHYSICS AND MORAL PHILOSOPHY.

- Builder (The) AN ILLUSTRATED MONTHLY MAGAZINE, for the ARCHITECT, ENGINEER, ARCHEOLOGIST, CONSTRUCTOR and ARTIST, conducted by GEORGE GODWIN, F.R.S., numerous full page and other illustrations of constructive building and engineering enterprise, fine art, etc, etc, COMPLETE from Vol 3, 1845, down to Vol 20, 1862, 18 stout folio vols, cloth, a valuable lot for a public library, or the professional man, 14.75.
- Civil Engineer and ARCHITECT'S JOURNAL, from its commencement in 1837 down to 1849, less 1842, 4to, 9 vols half calf and one cloth, 6.75, London, 1832-1849.

AN HIGHLY INTERESTING LOT, and will afford amusement, pleasure and instruction to those interested in building construction, civil and mechanical engineering, the early history of railway construction. The volume abounds with illustrations of all kinds of inventions and contrivances.

LOGIC, METAPHYSICS AND MORAL PHILOSOPHY.

2

- 8 Hamilton (Sir W.) LECTURES on META-PHYSICS and LOGIC, edited by Rev. H. L. Mansel and John Veitch, with an elaborate appendix and index, 2 stout 8vo, vols, eloth, 2.75, Boston, 1860.
- 9 Philosophy of S.R W. HAMILTON, arranged and edited by O. W. Wight, thick 8vo, cloth, 1.00, 1855.
- 10 Bowen (Francis) The METAPHYSICS of SIR WILLIAM HAMILTON, collected and arranged for the use of colleges and private student-, 563 pp, post Svo, cloth, 75c, 1871.
- 11 Chapters in Logic, containing Sir W. Hamilton's Lectures on Modified Logic, and selections from the Port Royal Logic, with preface by Dr. S. S. Nelles, 12mo, cloth, 35c, 1870.
- 12 Peisse (M. Louis) Fragments de Philosophie par M. William Hamilton, 390 pp, 8vo, sewn, 35c, Paris, 1840.
- 13 Massias (Baron) Probleme de L'Esprit Human ou Origine, Developpement et Certitude de nos Counaissances, 400 pp, 8vo, sewn, 35c, Paris, 1825.
- 14 Mahaffy's (J. P.) Translation of "Kants Prologomena to any Future Metaphysic," with appendix, 8vo, cloth. 75c, Longmans, 1872. This forms vol III. of the octave edition of "KANT's

CRITICAL PHILOSOPHY" for English readers.

- 15 Hickok (Dr. L. P.) RATIONAL PSYCHOLOGY, or the Subjective Idea and the Objective Law of all Intelligence, 717 pp, thick 8vo, cloth, 1.25, Auburn, 1849.
- 16 Smart (B. H.) BEGINNINGS of a New SCHOOL OF METAPHYSICS, comprising outline of Sematology. with sequel and appendix, 518 pp, 8vo, cloth, 75c, London, 1839.
- 17 Haven (Joseph) D.D., MENTAL PHILOSOPHY, including the intellect, sensibilities and will, 590 pp, crown 8vo, cloth, 60c, Boston, 1864.
- 18 Reid's (Dr.) Essays on the Powers of the Human Mind, including an essay on quantity and an analysis of Aristotle's logic, *portrait*, 3 vols, 8vo, *newly half bound*, 1.00, Edinburgh, 1812.

- 19 Stewart (Dug.ld) F.R.S., ELEMENTS of the PHLOSOPHY of the HUMAN MIND, the fine 4to edition, 2 vols, half calf, good copy, 1.00, London, 1792.
- 20 Whately's (Archbishop) ELEMENTS of LOGIC, 8vo, half morocco, 60c, London, 1836.
- 21 _____ Another edition, crown 8vo, cloth, 50c, 1859.
- 22 Whately's (Dr.) Elements of Rhetoric, comprising an analysis of the laws of moral evidence and of persuasion, with rules for argumentative composition and elocution, 545 pp, post 8vo, 50c, New York, n.d.
- 23 McGregor (P.) SYSTEM of LOGIC, comprising a discussion of the various means of acquiring and retaining knowledge and avoiding error, post Svo, cloth, 50c, 1862.
- 24 Thomson (Dr. W.) An Outline of the Necessary Laws of Thought, a treatise on Pure and Applied Logic, 4th edition, post Svo, cloth, 75c, New York.
- 25 Thompson's (Archbishop) Outline of the Necessary Laws of Thought, a treatise on pure and applied Logic, post Svo, cloth, 40c, Longmans, 1872.
- 26 Boyd (J. R.) Eclectic Moral Philosophy, 4th and revised edition, post 8vo, cloth, 35c, 1856.
- 27 McCosh (James) LL.D., LAWS of DISCURSIVE THOUGHT, being a text-book of formal logic, crown 8vo, cloth, 75c, 1871.
- 28 Smith (R. S.) A MANUAL of TOPOGRA-PHICAL DRAWING, revised and enlarged by C. McMillan, C.E., folding and other plates, Svo, cloth, 1.00, 1885.
- 29 Wayland (Francis) The Elements of Intellectual Philosophy, post 8vo, cloth, 40c, 1857.
- 30 Wayland (F.) Elements of Moral Science, post 8vo, cloth, 40c, Edinburgh, 1847.
- 31 Beattie (Rev. F. R.) M.A., Ph. D., Examiner in Knox College and in the University of Toronto, An Examination of the Utilitarian Theory of Morals, post 8vo, cloth, 30c, 1885.
- 32 Bucke (Dr. R. Maurice) MAN'S MORAL NATURE, an essay, 8vo, cloth, 60c, 1879.

LOGIC, METAPHYSICS AND MORAL PHILOSOPHY.

Burn (R. Scott) assisted by eminent authors and artists, OBJECT TEACHING, SCIENCES, MACHINES, and PROCESSES EXHIBITED in and DESCRIBED by 40 large sheet drawings, with letterpress descriptions, thick royal folio, half morocco, also the COMPANION HANDBOOK to the above, consisting of Letterpress, Essays, Engravings and Woodcuts, 520 pp, crown 8vo, 3.75, A Fullerton, London end New York, 1869.

An excellent work and equally well adapted for the professor or teacher in the class room or the library in the house. Has several double plates containing nearly 150 illustrations of botany in all departments, others relate to anatomy and structure of the human body, natural history and zoology, matter and motion, mechanics, hydrostatics, hydraulics, water power, mechanism, pneumatics, steam engines and locomotives, optics, the microscope, telescope, acoustics, electricity, galvanism and magnetism, geology and fossils, architecture, astronomy, including the seasons, tides, constellations, chemistry, heat and crystallography, conchology and classification of shells, brick making and pottery, glass making, cotton spinning and weaving, blacksmithing and painting, flax and silk, docks, lighthouses. There are thousands of practical illustrations, which will aid the eye in co-operating with the mind and furnish the student with information of the most practical kind.

- Science of Obligation, post Svo, cloth, 50c,
- 35 Wilson (Dr. W. D.) Elementary Treatise on Logic with a copious index of Terms and Subjects, post Svo, cloth, 50c, Appleton, 1856.
- 36 Taylor (Isaac) Physical Theory of Another Life, post Svo, cloth, 35c, 1836.
- 37 Taylor (I.) Lectures on Spiritual Christianity, post Svo, cloth, 35c.
- 38 Taylor (I.) The World of Mind, thick post cloth, 40c, 1858.
- 39 Wesley (Rev. C.) A Guide to Syllogism or a Manual of Logic, an Account of the Manner of Disputation now practised in the Schools at Car bridge, post Svo, cloth, a nice little volume, 4cc, H. G. Bohn, 1832.
- 40 Watt's (Dr. Isaac) The Improvement of the Mind, with a Discourse on Education, and the Remnants of Time employed in Prose and Verse, portrait, 2 vols, small 8vo, ealf gilt, 75c, Bentley, 1815.
- 41 Whewell (Dr. W.) LECTURES on the HIS-TORY of MORAL PHILOSOPHY in ENGLAND, Svo, boards, scarce, 75c, London, 1852.
- 42 Whewell's (Dr. W.) ELEMENTS of MORA. LITY, including POLITY, 2 vols, post Svo, cloth, 50c, 1845.
- 43 Payne (Geo.) Elements of Mental and Moral Science Designed to Exhibit the Original Susceptibilities of the Mind, etc., 8vo, half morocco, 65c, 1828.
- 44 Munsell (Oliver S.) PSYCHOLOGY, or the Science of Mind, crown Svo, cloth, 75c, Appleton, 1874.
- 45"Paley (W.) The Principles of Moral and Political Philosophy, 2 vols, 8vo, calf, 35c. 1803.
- 46 Kacon's Essays, with annotations by ARCH-BISHOP WHALELY, a good Svo edition, cloth, 1.00, London, 1857.

- 347 Fairchild (J. H.) Moral Philosophy or 48 Bacon's Advancement of Learning, edited by W. Aldis Wright, post 8vo, cloth, 5oc, Clarendon Press, 1873.
 - 49 Bacon (Lord) ESSAYS, also LOCKE'S Conduct of the Understanding, with essay by Dr. Porter, in I post 8vo vol, cloth, 25c, 1862.
 - 50 Locke's (John) Essay Concerning Human Understanding, with notes and illustrations, an analysis of his doctrine of Ideas, a treatise on the conduct of the understanding, a new method of a common-place book, elements of natural philosophy, etc, 2 vols, 8vo, half calf, a few pencil marks, 75c.
 - 51 Locke (Mr. John) POSTHUMOUS WORKS, Svo, calf, 6oc, At the Black Swan, 1706.

On the Conduct of the Understanding, an Examination of Malebrauche's Opinion of Seeing all Things in God, a Discourse on Miracles, Memoirs Relating to Anthony, First Earl of Shaftesbury, etc.

- 52 Hume's (David) Essays and TREATISES on Several Subjects, 2 vols, 8vo, half calf, a sound copy, 1.75, Edinburgh, 1817.
- 54 Smith (Adam) LL.D., The THEORY of MORAL SENTIMENTS, to which is added a dissertation on the Origin of Languages, and a critical biography of the author, by DUGALD STEWART, 538 pp, cloth, 75c, H. G. Bohn, 1861.
- 55 Parker (Theodore) Lessons from the World of Matter and the World of Man, edited by Francis Power Cobbe, portrait, 8vo, cloth, 6oc, London, 1865.
- 56 Beattie (James) LL.D., An Essay on the Nature and Immortality of Truth, fifth edition, corrected, 2 vols, 8vo, calf, 1774.
- 57 Reid (Dr. Thomas) An Inquiry into the Human Mind on the Principles of Common Sense, 12mo, calf, 40c, Dublin, 1764.
- A very early edition of this respectable old work.

contain nds with ge men.

C.

Examom the 21-1836.

roblems ors and s in full.

Physical

s of the y 22nd, rk, runs copy of

y faith-Method of the Ation of

at plans of the

pp, post

estions ational ondon.

amples n of a , 1848. dwin's

rd edi-

bridge,

Papers ceton. umbis

88. of the errors ion in

which pse as cle are 1, 75c,

s and res to 1.00,

LOGIC. METAPHYSICS AND MORAL PHILOSOPHY.

Scott Burn (R.) PRACTICAL DIRECTORY for the IMPROVEMENT of LANDED PROPERTY, RURAL and SUBURBAN, and the ECONOMIC CULTIVATION of its FARMS, a large 4 to volume of 608 pp, illustrated with 77 large plates and numerous woodcuts, cloth, 2.75, 1881.

Brewster's (Sir David) EDINBURGH ENCYCLOPÆDIA, with some hundreds of fine engravings, 18 vols, 4to, half calf, in sound library condition, 13.50, Edinburgh, 1830.

An optician of the highest rank and one of the most distinguished practical and experimental philosophers of modern times. Playfair, Jamison, Dugald Stewart, and Robinson were his companions. The above work was under his superintendence from its commencement to its close. It is folly to argue that this fine work is out of date, because no man of science who writes a book can afford to ignore those who originally propounded the ideas, made darkness light, and brought the knowledge to our doors. It is a work of reference and will be wanted from time to time, so long 68 men think, speak, and write, and the Public Librarian who secures the set, although only doing his duty, will be honored for casting bread upon the waters of time for the intellectual development of succeeding generations. In comparison to the contents the cost is almost nil.

pp, post 8vo, calf, 4oc.

By SOAME JENYNS, and includes The Chain of Universal Beinz, On a Pre-Existent State, The Nature of Time, Government and Civil Liberty, etc., etc.

- 61 Procedure (The) EXTENT and LIMITS of HUMAN UNDERSTANDING, 477 pp, 8vo, a cover loose, 35c, London, 1729. By PETER BROWNE.
- 62 Petvin (J. Letters Concerning Mind, also universal srithmetic, the differential calculus, and the doctrine of fluxions, 8vo, rough calf, 35c, 1750.
- 63 Ferguson (Adam) LL.D., Institutes of Moral Philosophy for the use of students in the College of Edinburgh, 12mo, tree calf gilt, 60c. Has the ownership label of Charles Goddard, well-known writer, and archdeacon of Lincoln, 1822.
- 64 Bentham (E.) Introduction to Moral Philosophy, 8vo, calf, with a bookplate, 40c, Oxford, 1746.
- 65 Casaubon (Meric) D.D., a Treatise Con-cerning Enthusiasme, as it is an effect of nature, but is mistaken by many for either divine inspiration or diabolical possession, 8vo, calf, with the ownership label of Dean Goddard, 60c, at the Golden Key, 1656.
- 66 Procedure, Extent and Limits of Human Understanding, by Peter Brown, Bishop of Cork, 477 pp, 8vo, half calf, 50c, 1729.
- 67 Loose Hints upon EDUCATION, chiefly concerning the culture of the heart, 2nd edition, enlarged, 8vo, calf, 50c, Edinburgh, 1782. By the well-known Lord Kames. The volume has the bookplate of the Marquis of Hastings.
- 69 Enfields (W.) LL.D., HISTORY of PHILOS-OPHY from the earliest periods, a good Svoedition of this useful book, cloth, 1.00, London, 1837.
- 70 Fordyce (D.) Dialogues Concerning Education, 2 stout post 8vo vols, calf, 50c, Belfast, 1753.

60 Disquisitions on Several Subjects, 165 | 71 Stow (David) The TRAINING SYSTEM (stablished in the Glasgow Normal Seminary and its Model Schools, etc, with frontispiece, post 8vo, morocco, gilt edges, 1.00, Glasgow, 1840. A presentation copy to the Rt. Hon. Lord Monteagle (Thos. Spring Rice), with the author's compliments. B٤

44 E

Tw

Fi

83

1

84

A1

85

86

- 72 Woodward (Thos. Best) A Treatise on the Nature of Man regarded as Triune, with an outline of a philosophy of life, Svo, cloth, 50c, London, 1864.
- 73 Light of NATURE PURSUED, by Edward Search, Esq, 7 vols, 8vo, half calf, a sound set, 1.25.
- 74 Another copy in 2 stout Svo vols, with life of the author, by Sir John Mildmay, 1.50.

BY ABRAHAM TUCKER. A magistrate and a farmer, who was also an original as well as a profound old investigateur of the last century, and to whom most writers on moral philosophy in modern times are greatly indebted.

- 75 Hawkins (Jas.) PHASES of MODERN DOCTRINE, in relation to the intellectual and active powers of nature and man, 8vo, cloth, 75c, Longmans, 1878.
- 76 Whinfield (W. H.) Ethics of the Future, 8vo, cloth, 50c. London, 1876.

The progressiveness of Moral Inquiry and Conception, Fictions of Poetry, Moral Utility, Mund, Development of Religion, Beauty, Reason, etc.

- 77 Bowne (P. B.) The Philosophy of Herbert Spencer, being an examination of the first principles of his system, post 8vo, cloth, 60c.
- 78 Spencer's (Herbert) ESSAYS, SCIENTIFIC, POLITICAL and SPECULATIVE, 3 vols, 8vo, cloth, library edition, 3.25, Appleton, 1891.
- 79 Spencer's (Herbert) PRINCIPLES of BIO-LOGY, 2 vols, 8vo, cloth, 2.50, Appleton, 1888.
- 80 Smedley (E. A.) A Treatise on Moral Evidence, illustrated by numerous examples both of general principles and speceific actions, 8vo, cloth, 50c, Cambridge, 1850.

Bayle's (Pierre) DICTIONNAIRE HISTORIQUE et CRITIQUE, Revue, corrigee et augmentee par l'autheur, fine old vignettes on titles, 4 thick folio vols, ca'f, a cover loose, 4.25, Rotterdam, 1720. 81

This is the THIRD EDITION of this GREAT HISTORICAL WORK, to which BRUN ET thus refers :-"Edit, la plus belle et la plus recherchee de ce dictionnaire." This edition, we may ad d, has the Two LIVES of DAVID.

First Edition (The) of the ENCYCLOPÆDIA BRITANNICA, OF a DICTIONARY OF ARTS and SCIENCES, compiled upon a new plan in which the different sciences and arts are digested into distinct treatises or systems, illustrated with 160 copper plates, by a society of gentlemen in Scotland, COMPLETE, 3 stout 4to vols, calf gilt, scarce, 2.25, 1775.

Should find a place in a good public library by the side of the best edition.

or, the Philosophy of Things as developed from the Study of the Philosophy of Words, scarce and interesting work, 535 pp, 8vo, cloth, 75c, London, 1842.

VT

of

58

ne

n

tal m-

It

tan. the

88

ab.

and

last

\$40.

agle

the

an

oth.

ard

ols,

nay,

mer.

most

eatly

ERN and

loth,

ture,

tion nt of

rbert

prin-

IFIC.

8vo,

BIO-

888.

Eviboth

Svo.

1.

84 Student's (The) Guide to the University of Cambridge, 328 pp, post Svo, cloth, 40c, Cambs, 1863.

ARITHMETIC, ALGEBRA AND GEOMETRY.

- 85 Byrne (Oliver) DUAL ARITHMETIC, a new art, 2 vols, 8vo, cloth, 1.75, Bell & Daldy, 1867.
- 86 Wright's Self Instructions in Pure Arithmetic, 8vo, cloth, boards, 40c, Cambs, 1829.
- 87 Burritt (E. Hinsdale) LOGARTHMIC ARITH-METIC, containing Tables of Logarithms, etc, etc, designed for the instruction of youth in the schools and academies of New England, 254 pp, 8vo, boards, scarce, 1.00, Williamsburg, 1818.
- 88 Vyce (C.) Tutor's Guide, being a complete System of Arithmetic, with various branches of the Mathematics, etc, 330 pp, ALSO THE KEY, which extends 370 pp, together nearly 700 pp, in 1 thick 12mo vol, half calt, 1.00, *Philadel*phia, 1806.
- 89 Potter (J.) The Schoolmaster's Assistant, or Tables of Arithmetic, on a curious and new construction, 40 pp. 4to, sewn, 35c, 1780.
- 90 Parke (Uriah) LECTURES on the PHILOSO. PHY of NUMBERS, 339 pp, post 8vo, calf, 40c, Zanesville, 1842.
- 91 Hind's (J.) Principles and Practice of Arithmetic, 9th edition, post Svo, cloth boards, 40c, 1859.
- 92 Aine (Levret) Cours Complet a L'Usage Des Officers de la Marine Marchande, ARITHMETI-QUE et GEOMETRIE, in 1 8vo vol, half calf, 60c, Paris, 1849.
- 93 Schuyler (A.) Higher Arithmetic embracing the Science of Numbers, and the Art of their application, crown 8vo, cloth, 40c, New York, 1867.
- 94 Fish (D. W.) Arithmetical Problems, oral and written, with tables of money, weights and measures, post 8vo. cloth, 40c, 1877.

- 83 Johnson (Edward) NUCES PHILOSOPHICE, 95 Redknap (W.) Arithmetic on Improved Principles, including the properties of Logarithms, etc, crown 8vo, sewn, 30c, 1854.
 - 96 New Canadian Commercial Arithmetic, by CLARKE MOSES, R. C. Cheswright, C. H. Brooks, and Thos. Bengough, 8vo, cloth, 75c, 1889.
 - 97 Wise (Thos.) Accountant, the NEWEST YOUNG MAN'S COMPANION, 412 pp, thick 12mo, sheep, a curious old book, 1.00, Berwick, James Horn, his Book, May ye 29th, 1767, 1763.

Including English Grammar and instructions to write a variety of hands, letters on compliment and business, forms of Indentures, Acquitances, Arithmetic, Book-keeping, and Geography. The management of Horses and directions for travellers to prevent and cure most Distempers which are incident to. The Art of Painting in oil and water colors, exports and imports, etc.,

- 98 Hinds' Algebra, for the use of students in the university, 8vo, half calf, 50c, 1841.
- 99 Select Parts of Professor Saunderson's Algebra, for the use of students at the universities, 412 pp, 8vo, calf, 40c, 1761.
- 100 Simpson (T.) F.R.S., Treatise of Algebra, first American edition, Svo, calf, 60c, Philadelphia, 1809.
- 101 Bourdon (M.) Elemens D'Algebra, 668 pp, 8vo, calf, 50c, Paris, 1823.
- 102 Davies (C.) LL.D., Elements of Algebra on the Basis of M. Bourdon, and embracing Sturm's and Horner's Theorems and Examples. Svo, sheep, 40c. 1840.
- 103 Stoddard (J. F.) and W. D. Henkle, The UNIVERSITY ALGEBRA, also the KEY, 2 vols, crown .8vo, 1.00, 1866.
- 104 Loomis (E.) LL. D., TREATISEON ALGEBRA, also a KEY to the Treatise on Algebra, for the use of teachers only, 1.00 the two, 1889.
- 105 Colenso's (Rev. J. W.) Elements of Algebra, the early 2nd edition, crown 8vo, cloth, 40c, Cambs, 1841.
- 106 Colenso's (Dr.) Elements of Algebra, Part I; also Examination Papers; also the KEY, together 3 vols, 75c.
- 107 Colenso's (Dr.) ALGEBRA, the fine 8vo edition, 2 parts in I vol, with ANSWERS, cloth, 1.00, London, 1855.

- Hall's (W. H.) ENCYCLOPÆDIA, OF DICTIONARY OF ARTS and SCIENCES, on a new and improved plan, in which the respective sciences are arranged into complete systems, and the arts digested into distinct treatises. etc., forming a general circle of science, forming the most comprehensive library of universal knowledge ever published in the English language, with plates illustrating the subjects, 3 stout folio vols, calf, a cover loose, 1.25. 108 An elaborate as well as an interesting old work, published at the end of the last century.
- Dictionary (New and Complete) of the ARTS and SCIENCES. comprehending all the branches of useful knowledge, with accurate descriptions as well of the various machines, instruments, tools, figures and schemes necessary for illustrating them, with above 300 COPPER PLATES, curiously en. graved by Mr. JEFFREYs; the well known geographer, 6 stout 8vo vols, calf, lost one cover, very interesting to mechanics and others, and very cheap for 1.25, At Homer's Head, 1754. 109
- 110 Sangster's Elements of Algebra, also the 125 Bonnycastle's Introduction to Algebra, KEY, 2 vols, 50c the two.
- 111 Wallace (Professor) Elements of Algebra, crown 8vo, cloth, 25c, Cassell, Peter & Galpin.
- 112 Todhunter's Larger Algebra, for the use of colleges and schools, with numerous examples, crown Svo, cloth, 75c, Cambridge, 1875.
- ---- The smaller edition, 12mo, cloth, 113 -25c.
- 114 Bridge's Algebra, 11th edition, Svo, boards, 30c, 1842.
- 115 Louden's (J.) Elements of Algebra, post 8vo, cloth boards, 25c, 1873.
- 116 Higgs (W. P.) Algebra Self-Taught, 3rd edition, crown Svo, cloth, 40c, London, F. N. Spon, 1888.
- 117 Perkins (G. R.) Treatise on Algebra, Svo, calf, 75c, 1857.
- 118 Wood's (James) Elements of Algebra, designed for the use of students of the university, 8vo, half calt, 35c, Cambs, 1810.
- 119 Huckley (C. W.) Treatise on Algebra, 500 pp, 8vo, calf, 75c, 1857.
- 120 Fenning's (Daniel) Young Algebraist's Companion, including the Doctrine of Vulgar Fractions, etc, 12mo, calf, 30c, London, 1808.
- 121 Euler (L.) Algebra, with solutions of the problems by Charles Taylor, 8vo, boards, 35c, 1824.
- 122 ------ Introduction to Algebra, for those who are acquainted only with the first principles of arithmetic, Svo, boards, 50c, Boston, 1828.
- 123 Woods (James) ALGEBRA, 12th edition, revised and enlarged, with notes, propositions and examples by LUND, Svo, cloth boards, 75c, 1845.
- 124 An Appendix to Wood's Algebra, comprising notes, additional propositions, examples, etc, 228 pp, 8vo, sewn, 40c, 1840.

revised by James Ryan, and enlarged by Jenkins, post 8vo, half calf, 30c, 1856.

142 So

35

143

ed

144

4

145 31

146

2

147

148

I

149

3

150

1

15

15

15

15

I!

- 126 **Robinson** (II. N.) New University Algebra, a theoretical and practical treatise, crown 3vo, calf, 60c, 1871.
- 127 Colburn (W.) Introduction to Algebra, upon the inductive method of instruction, post Svo, calf, 6oc, 1841.
- 128 Thomson (J. B.) LL.D., New Practical Algebra, crown Svo, cloth, 40c, New York, 1880.
- 129 Schuyler (A.) Complete Algebra, crown Svo, calf, 40c, 1870.
- 130 Fickiin (J.) Complete Algebra, crown Svo, half calf, 50c, 1874.
- 131 Wrigley's Examples and Problems, no title, 3rd edition, Svo, cloth boards, 40c.
- 132 Bland's ALGEBRAICAL PROBLEMS, etc., with their solutions, ninth edition, 8vo, cloth boards, 75c, 1849.
- Another copy of the 4th edition, also the key, 2 vols, 8vo, boards, 75c, Cambridge, 1824.
- -Another copy, same edition, without 134 ----the key, 40c.
- 135 Murphy (R.) Treatise on the Theory of Algebraical Equations, 8vo, cloth, 3oc, 1839.
- 136 Key to Young's Elements of Algebra in Weales series, 25c.
- 137 Key to Bonnycastle's Guide . Arithmetic, 25c.
- 138 Key and supplement to the various works on arithmetic, by C. Waterhouse, 25c.
- 139 Key to Bonnycastle's Algebra, by Ryan, 25c.
- 140 Key to Ingram's Concise System of Mathematics, by Trotter, 35c.
- 141 Key to the New Practical Arithmetic in the Mathematical Series of B. Greenleaf, 35c.

Schools, by Barnard Smith and A. McMurchy, 35c.

'e

8,

70

h

18

S.

p

es

n.

4t

110

on,

im

of

in

rks

:5c.

th-

the

- 143 Key to Colenso's Algebra, Part I, new edition, 25c.
- 144 Key to Olney's First Principles of Algebra, 40C.
- 145 Key to Stoddard's New Practical Arithmetic and complete Arithmetic, crown 8vo, cloth, 4oc.
- 146 Key to Thomson's Algebra, post 8vo, cloth, 250.
- 147 Key to Bridge's Algebra, by G. J. Aylmer, post Svo, cloth boards, 25c, 1835.
- 148 Lund's (Thomas) Short and Easy Course of Algebra, etc, post Svo, cloth, 30c, London, 1870.
- 149 Bryan's (Jos.) Elementary Treatise on Algebra, Theoretical and Practical, 6th edition, 391 pp, post 8vo, calf, 3oc, 1851.
- 150 Laurence (C. D.) Elements of Algebra, designed for schools, academies and colleges, post 8vo, half calf, 30c, 1853.

GEOMETRY, TRIGONOMETRY AND ASTRONOMY.

- 151 Euclid's Elements of Geometry, A GOOD Svo EDITION BY POTTS, half calf, gilt, 1.00, Cambridge, 1845.
- -- Smaller edition, same editor, cloth 152 boards, 35c, 1874.
- 153 Simpson's (R.) Elementary of Euclid, also the Book of Euclid's Data, with plates and diagrams, 500 pp, 8vo, calf, 50c, 1775.
- 154 Playfair's (J.) F. R. S., Elements of Geometry containing the first six Books of Euclid with a supplement on the quadruple of the circle and the Geometry of Solids, 8vo, half calf, 50c, 1855.
- 155 Casey (J.) F.R.S., Sequel to the first six books with easy introduction, etc., 12mo, cloth, 350, 1882.
- 156 Stromers's (Martin) EUCLIDIS ELEMENTA GEOMETRIEN, etc., 268 pp, crown 8vo, cloth; 40c, Stockholm, 1884.
- 157 Lardner's (D.) Elements of Euclid, with a commentary and a treatise on solid geometry, 8vo, boords, 35c, 1832.
- 158 Olney (E.) TREATISE on SPECIAL GEOME-TRY, School Edition, including Plane, So'id and Spherical Geometry and Trigonometry, with the necessary tables, Svo, *half calf*, 1.00, 1872.
- 159 Perkins (G. R.) LL.D., Plane and Solid Geometry, also Plane and Spherical Trigonometry and Mensuration, etc., 8vo, calf, 1.00.
- 160 Whitlock (G. C.) Elements of Geometry, Theoretical and Practical, containing a full explanation of the construction and use of Tables and a new System of Surveying, 8vo, calf, 35c, 178 1853.

- 142 Key to Advanced Arithmetic for Canadian | 161 Wenthworth (G. A.) A Text Book of Geometry, revised edition, thick post Svo, half calf, 60c, 1892.
 - 162 Cresswell's (D.) Euclid's Elements methodically arranged and concisely demonstrated, together with the elements of solid geometry, Svo, half calf, 75c, Cambridge, 1819.
 - 163 Chauvenet (W.) LL.D., Treatise on Elementary Geometry, with appendices containing exercises for students and introduction, 8vo, cloth, 75c, 1875.
 - 164 O'Brien (M.) Treatise on Plane Coordinate Geometry, or the application of the method of co-ordinates to the solution of problems in plane geometry, post Svo, cloth boards, 50c, Cambs, 1844.
 - 165 Schofield (N.) Elements of Plane Geometry and Mensuration, also higher Geometry and Trigonometry, 2 vols, 8vo, half calf, 1.25, 1845.
 - 166 Wright's (R. P.) Elements of Plane Geometry, 2nd edition, with a preface by HIRST, crown 8vo, cloth, 35c, 1876.
 - 167 Loomis (E.) LL.D., Elements of Geometry, conic sections and plane trigonometry, revised edition, with appendix, crown 8vo, sheep, 50c, 1887.
 - 168 Bonnycastle (E.) Practical Geometry and Mensuration, new edition with appendix by RUTHERFORD, post Svo, calf, 50c, London, 1854.
 - 169 Watson (H. W.) The Elements of Plane and Solid Geometry, post Svo, cloth, 50c, Longmans, 1872.
 - 170 Chambers Explicit Euclid, post 8vo, cloth, 25c.
 - 171 Davies (C.) Practical Geometry, with selected applications in Mensuration in Artificers' work and Mechanics, post 8vo, calf, 35c, 1842.
 - 172 Duncan (Thos.) Elements of Solid Geometry, Theoretical and Practical, including Mensuration of Solids, etc, etc, 8vo, cloth boards, 35c, 1834.
 - Elements of Plane Geometry, 173 Theoretical and Practical, Svo, boards, 30c, Edinburgh, 1839.
 - 174 Dupuis (N. F.) Elements of Geometrical Optics, with numerous woodcut illustrations, Svo, cloth, 35c, Kingston, Ont., 1868.
 - 175 Dutton (Matthew) Treatise on Conic Sections, Spherical Geometry and Trigonometry, 8vo, sewn, scarce, 75c, New Haven, 1824.
 - 176 Angel (H.) Practical Plane and Solid Geometry, post 8vo, 25c, 1873.
 - 177 Plane Geometry According to Euclid, post 8vo, cloth, 25c, Chambers' Educational Course.
 - Another copy, with the Key, 2 vols, post 8vo, 40c.

- cal Geometry and its application to architectural drawing, 8vo, cloth, 40c, 1853.
- 180 Bell (A.) Solid and Spherical Geometry and Conic Sections, etc, post 8vo, sewn, 20c, W. & R. Chambers.
- 181 Adams (Geo.) Geometrical and Graphical Essays, containing a description of mathematical instruments used in geometry, civil and military surveying, with new and practical problems, *illustrated*, 34 *folding plates*, thick 8vo, calf, little torn, 50e, 1808.
- 182 Perkin's (G. R.) Plane Trigonometry and its Application to Mensuration and Land Surveying, accompanied with Tables, 8vo, calf, 1.00, 1860.
- 183 Loomis (E.) LL.D., Elements of Analytical Geometry and of the Differential and Integral Calculus, 8vo, calf, 60c, 1855.
- 184 Vince (S.) Treatise on Plane and Spherical Trigonometry, etc, 8vo, half calf, 35c, Cambs, 1805.
- 185 Loomis (E.) Elements of Geometry, Conic Sections and Plane Trigonometry, crown 8vo, sheep, 40c, 1887.
- 186 Loomis (E.) Elements of Plane and Spherical Trigonometry with their applications to mensuration, surveying and navigation; also TABLES of Logarithms of numbers, also of lines and tangents, with a traverse table, etc, in 1 8vo vol, sheep, 1.00, New York, 1888-90.
- 187 Woodhouse (R.) Treatise on Plane and Sperical Trigonometry, 8vo, half calf, 40c, 1813.
- 188 Schofield (N.) ELEMENTS of PLANE GEO-METRY and MENSURATION, also Higher Geometry and Trigonometry, 2 vols, 8vo, half calf, 1.25, 1845.
- 189 Scott (W.) Plane Trigonometry and Mensuration, for the use of the Royal Military College, 8vo, calf, 40c, London, 1845.
- 190 Snowball's (J. C.) Elements of Plane and Spherical Trigonometry, etc, 8vo, cloth boards, 30c, 1844.
- 191 Keith (Thomas) Introduction to Plane and Spherical Trigonometry, the Stereographic Projection of the Sphere and the Theory of Navigation, new edition, by MAYNARD, folding plates, Svo, cloth, 65c, Longmans, 1854.
- 192 Frome (Lieut.) Outline of the Method of Conducting a Trigonometrical Survey for the Formation of Topographical Plans, with instructions for filling in, measuring and sketching, with useful, problems in Geodesy and practical astronomy, etc, 8vo, cloth, 6oc, London, 1840.
- 193 Snowball (J. C.) Elements of Plane and Spherical Trigonometry, with the construction and use of tables of Logarithms, etc, 9th edition, crown 8vo, cloth, 50c, Cambs, 1857.

179 Burn (R. Scott) Illustrated London Practi- 194 Legendre (A. M.) ELEMENTS of GEOME. TRY and TRIGONOMETRY, translated by DAVID BREWESTER, and revised by Davies, 5th 8vo edition, calf, 60c, 1836.

212

T

b

1

8

213

214

ti

2

v

8 1

216

1

21'

21

21

25

2:

2

- 195 Vince (S.) F.R.S., Treatise on Plane and Spherical Trigonometry, etc. Cambs, 1810; Conic Sections, by the same, 1810; Hydrostatics, by the same, in I Svo vol, 50c.
- 196 Bridge (B.) Treatise on the Elements of Plane Trigonometry, 1822; also Elements of Conic Sections, with the sections of the Conoids, in I Svo vol, half calf, 40c, 1818.
- 197 Lacroix and Bezout, Treatise on Plane and Spherical Trigonometry, and on the application of Algebra to Geometry, for the use of students at Cambridge, New England, 8vo, cloth boards, 40c, 1833.
- 198 Hall (T. G.) Treatise on Plane and Spherical Trigonometry, 8vo, cloth, 35c, London, 1835.
- 199 Turnbull (W. P.) Introduction to Analytical Plane Geometry, Svo, cloth, 1.00, Cambridge, 1867.
- 200 Johnson (A. C.) Elements of Plane and Spherical Trigonometry, theoretical and practical, 7th edition, 8vo, half calf, 40c, 1882.
- 201 Beasley (R. D.) Plane Trigonometry, 2nd and revised edition, crown Svo, cloth, 40c, 1865.
- 202 Hymers (J.) Treatise on the Theory of Algebraical Equations, Svo, cloth boards, 40c, 1840.
- 203 Hymers' (J.) Treatise on Trigonometry, in' cluding tables and Logarithms, 8vo, boards 35c, Cambridge, 1841.
- 204 Hymers' Treatise on Analytical Geometry of three dimensions, etc, etc, 8vo, boards, 35c, 1830.
- 205 Hymers (J.) Treatise on Trigonometry, Trigonometrical Tables and Logarithms, Svo, cloth boards, 30c, 1841.
- 206 West (John) Elements of Mathematics, comprehending Geometry, Conic Sections, Mensuration, Spherics, with plates, a well used and scarce volume, 50c, Edinburgh, 1784.
- 207 Sergeants (L.) Elementary Mathematics, post 8vo, cloth, 25c, Collins' Science Series, 1873.
- 208 Thomson (Jas.) LL.D., Elements of Plane and Spherical Trigonometry, with the first principles of Analytic Geometry, Svo, cloth, 350, 1851.
- 209 Wilson (Rev. R.) System of Plane and Spherical Trigonometry, including a treatise on Logarithms, Svo, cloth, 40c, Cambs, 1831.
- 210 Ferguson (Jas.) The Art of Drawing in Perspective made easy, plates, 8vo, boards, 35c, Edinburgh, 1802.
- 211 Smith (Seba) New Elements of Geometry, Svo, cloth, 75c, 1850.

TOPOGRAPHY and HIGHER SURVEYING, edited by CADY STALEY, A.M., C.E., 8vo, cloth, 75c, 1872.

Ê.

ID

nd

0:

28,

of

ls,

ne

:2.

111-

th

mi-

on.

ly.

m

nd

ac

Ind

OC.

in'

ds

35c,

try,

Svo.

Dm.

ura

and

tics,

ies,

of

the

oth,

and

e on

g in

35c,

etry,

- 213 Gummerl (J.) TREATISE on SURVEYING, 8vo, calf, 75c, 1835.
- 214 Raker's Rudimentary Treatise on Mensuration, Measuring, Levelling, etc, post 8vo, cloth, 20c, London, 1871.
- 215 Hawney's Complete Measurer, or the whole Art of Mensuration, containing a plain and comprehensive Treatise on Practical Geometry, 12mo, calf, 40c, Dublin, 1818.
- 216 Haswell (C. H.) Mensuration and Practical Geometry, including tables, weights and measures, vulgar and decimal fractions, mensurations of areas, lines, surfaces, etc, 12mo, calf. 40c, 1858.
- 217 Portlock's (Major-Gen.) PAPERS on GEO-METRICAL DRAWING, Military Mining, the Defence of Coasts, etc, 168 pp, 4to, 40c, John Weale, 1858.
- 218 Geometrical Drawing, a military work, bound up without title and interleaved, 4to, half calf, 50c.
- 219 Ostrander (T.) Complete System of Men suration of Superfices of Solids of all regular Figures, 8vo, boards, 35c, 1833.
- 220 Taylor (Brook) LL.D., Principles of Linear Perspective, or the Art of designing on a Plate, etc, with 13 folding plates, also fine port by DUDLEY, 8vo, scarce, 75c, 1811.
- 221 Hutton (C.) TREATISE on MENSURATION, both in Theory and Practice, 646 pp, 4to, calf, binding cracked, the woodcuts IN THIS WORK being by THOS. BEWICK, scarce, 1.75, New castle upon Tyne, 1770.
- 222 Kirby's Method of Perspective in its greatest simplicity, a neatly executed manuscript on 22 pp, with diagrams, 8vo, bound in calf, about 1790, 50c.
- 223 Arago's (Francois) POPULAR ASTRONOMY, trauslated from the original and edited by AD-MIRAL W. H. SMITH, D.C.L., and ROBERT GRANT, F.R.A.S., with folding astronomical plates and other illustrations in the text, 2 stout 8vo vols, cloth, 3.25, Longman's, 1855.
- 224 Long (Roger) F.R.S., ASTRONOMY, 2 vols in i thick 4to, calf, 1.00, Cambridge, for the author, 1742.
- 225 Astronomy, Seven RARE and INTEREST-ING OLD ASTRONOMICAL CHARTS of the FIXED STARS, etc, very fine examples of old engravings of animals, etc, imp tolio (double page), 1.75 the lot.

Includes PLANISPHERIUM COELESTA, with insets by Descartes and others. The RIGHT ASCENSIONS and Declina-tions of the PRINCIPAL FIXED STARS in both Hemis-phears to ye year 1678. ZODIACUS STRLLATUS CUJUS Limiibus Planetarum Omnium Visibiles vize Compre-headuntur. WHISTON'S (W.) A SCHEME of the SOLAR SYSTEM, with the Orbits of the Comets and Planets belonging thereto, A fine large sheet, with abundant letterpress, etc.

- 212 Gillespie (Wm.) TREATISE ON LEVELING, 226 Berou (Pierre) ATLAS COSMOBIOGRAPHI-QUE, 12 very large imp folio colored plates of the STELLAR UNIVERSE, with text title, unbound, 1.25, Paris, 1859.
 - 227 Hill (John) M.D., URANIA, or a Complete View of the Heavens, containing the Ancient and Modern Astronomy in the form of a Dictionary, with interesting and curious old plates, 4to, calf, 40c, half caif, 1.00.

Explaining their origin and situation of the stars, etc. according to the Egyptian and the Grecian Fable, and a very particular enquiry into the history of those mention-ed in the Sacred Writings and in the Old Poets and Ristorians. Our author was entnent for his knowledge of natural history, botany, etc, and wrote many books and fell foul of the Royal Society.

228 Cleomedis Meteora, Græce et Latine, ROBERTI BALFOREI Commentarivs in libros dvos CLEOMEDIS de Contemplatione Orbium. Cælestum, in 1 vol, 4to, calf gilt, scarce, 1.25, 1605.

AN ANCIENT GREEK ASTRONOMER, who maintains in the above work that the form of the earth is spherical, and that the number of fixed stars is infinite, that the moon's rotation on its axis is performed in the same time as its synodical revolution.

- 229 Bonnycastle's (John) Introduction to Astronomy, folding plates of the stars, 8vo, boards, 35c, London, 1822.
- 230 Mitchell's (O. M.) Orbs of Heaven, or the Planetary and Stellar Worlds, illustrations, crown Svo, cloth, 50c, 1851.
- 231 Proctor (R. A.) Myths and Marvels of Astronomy, 8vo, cloth, a capital work, and nice and clean, the binding a little discolored, 75c, London, 1888.
- 232 Garbett (E. L.) Architect, The Students' Guide to the Practice of Designing, Measuring, and Valuing Artificer's Works, with directions for taking dimensions, tables of constants, etc, with woodcuts and folding plates, 8vo, cloth, 75c, London, 1853.
- 233 Lunn (J. R.) OF MOTION, an Elementary Treatise, 8vo, cloth, 35c, Cambridge, 1859.
- 234 Hancock (Blith) The Doctrine of Eclipses to the Solar and Lunar, 8vo, calf, 35c, Norwich, 1882.
- 235 Brunnow's Spherical Astronomy, Part I. including the chapters on Parallax, Refraction, Aberration, Precession and Nutation, Svo, cloth boards, 25c, Cambridge, 1860.
- 236 Gregory (Dr. G.) Lectures on Experimental Philosophy, Astronomy and Chemistry, with engravings, 2 vols, post Svo, half calf, 40c, London, 1808.
- 237 Deane (W.) Description of the Copernican System, with the Theory of the Planets, etc. etc, with interesting folding plates, 106 pp, 8vo, sewn, 35c, 1738.
- 238 Derham's (W.) Astro-Theology, folding Astronomical plates, 8vo, calf, 35c, at the Princes Arms, 1721.

ASTRONOMICAL, NAUTICAL, FINANCIAL AND OTHER TABLES. 10

- 239 Dodwell (Mr. Henry) Scholar and critic | 250 Moore's (J. H.) PRACTICAL NAVIGATOR, and Camden professor at Oxford, LIFE, with an account of his works and manuscripts, including a letter from DR. HALLEY on "DE CYCLIS," fine portrait, 8vo, calf, scarce, 75c, Bishop Beveridge's Head, 1715.
- 240 Warren (Dr. H. W.) Recreations in Astronomy, with directions for practical experiments and telescopic work. numerous illustrations, post 8vo, cloth, 75c, Harpers, 1879.
- 241 Atkinson (H.) On Astronomical and Other Refractions, with a connected inquiry into the Law of Temperature in different Latitudes and Altitudes, 120 pp, 4to, sewn, 4oc.

From the transactions of the Astronomical Society, Has elaborate calculations and notes respecting climatic changes, etc., in North and South America. The above being a presentation copy from the author.

- 242 Davies (T.S.) Inquiry into the Geometri-cal Character of the Hour Lines on the Antique Sun Dials, also the Equations of Loci Traced upon the Snrface of the Sphere, etc, 4to, cloth boards, 40c, In the Edinburgh Royal Society Trans, 1820.
- 243 Thomson (Adam) Time and Timekeepers, with illustrations, post 8vo, cloth, 4oc, London, 1842.
- 244 Mind (J. R.) The Solar System, a descriptive treatise upon the sun, moon and planets, post Svo, cloth, 25c, New York, 1852.
- 245 Grant (A. R.) Plane Astronomy, Part I., including explanations of Celestial Phenomena, and descriptions of the principal astronomical instruments, 8vo, cloth boards; 35c, Cambs, 1850.
- 246 Laming (R.) Matter and Force, an analytical and synthetical essay on physical causation, in which the laws of chemistry, electricity and heat are derived mathematically from an uniform volition, 8vo, cloth, 4oc, London, 1851.
- 247 Laplace (M. Le Marquis de) EXPOSITION du SYSTEM du MONDE, with portrait slightly spotted, 4to, half calf, scarce, 1.25, Paris, 1824

One of the GREATEST ASTRONOMERS and MATHEMATICIANS of any age or country. The above is a kind of exposition of his La Mecanicique Celeste, with other important discoveries.

ASTRONOMICAL, NAUTICAL, FINANCIAL AND OTHER TABLES.

- 248 Mackay (A.) LL.D., THEORY and PRAC-TICE OF FINDING LONGITUDE at LAND OF SEA, including the various methods of determining the latitude of a place, the variation of the compass, with NEW TABLES, 3rd edition, enlarged, folding plates, 2 large Svo vols, cloth boards, 1.25, London, 1810.
- 249 Galbraith (W.) MATHEMATICAL and ASTRONOMICAL TABLES, for the use of students in mathematics, practical astronomers, surveyors, engineers and navigators, etc, etc, 8vo, cloth boards, 75c, Edinburgh, 1835.

- including the tables of latitude and longitude at sea, etc, stout 8vo, calf, a used copy of a well. known work for 35c, 1828.
- 251 Russell (J. Scott) Report of the Committee of the British Association on Waves, with large folding plates, 8vo, sewn, 40c, with the author's compliments, 1838.

26

2

- 252 Mutton's (C.) LL.D., MATHEMATICAL TABLES, containing the common Hyperbolic and Logistic Logarithms, etc, new edition, with additional tables by Dr OLINTHUS GREGORY, royal Svo, calt, a capital copy, London, 1834.
- 253 Haviland (James) Tables of Specific Gravities of all Substances, their superficial and solid contents, land measuring, old and new weights and measures, mechanical power, etc, 8vo, cloth, 1.00, John Weale, 1846.
- 254 Cape's (J.) F.R.S., Mathematical Tables, containing Logarithms, Logarithmic Lines, Tangents and Secants, etc, imp Svo, cloth, 60c, 1860.
- 256 Sueur (P. le) Commercial Tables, consisting of sterling exchanges reduced to dollars and cents, etc, Svo, cloth, 35c, Quebec, 1857.
- 257 Wilson (W.) M.A., Navigation Plainly Laid Down and Clearly Demonstrated, with Examples, Rules, and all the necessary Tables, Jolding plates, 534 pp, 8vo, strongly half bound, 50c, Edinburgh, 1784.
- 258 Macdiarmid (A.) Practical Navigation, or the Navigator's Pocket Guide, etc, 8vo, cloth, 20c, Liverpool, 1856.
- 259 Baim (W.) Essay on the VARIATION of the COMPASS, showing how far it is influenced by a change in the direction of the ship's head, etc, etc, Svo, half calf, 35c, Edinburgh, 1817.
- 260 Gower (R. H.) Original Observations regarding the inability of ships to perform their duty with promptitude and safety, etc, with a description of a propeller or floating anchor, with folding plates, 4to, cloth boards, 35c, Ipswich, n.d.
- 261 Knapen (D. M.) The Mechanic's Assistant, a thorough practical treatise on Mensuration and the Sliding Rule, etc, etc, post 8vo, half calf, 50C, 1850.
- 262 Mayer (Tobia) New and Correct Tables of the Motions of the Sun and Moon, also the Method of Finding the Longtitude Improved, also LUNAR TABLES, etc, in I 4to vol, scarce, 1.00, London, 1770, etc.

A celebrated Mathematician and Astronomical Discoverer, whose widow received £3,000 for the above Lunar Tables.

263 Thornton's (T.) East Indian Calculator, or Tables for assisting computation of Batta, Interest, Commission, Rent, Wages, etc, of Indian Money, with Tables of Exchanges, etc, Svo, half calf, 50c, London, 1823.

ASTRONOMICAL, NAUTICAL, FINANCIAL AND OTHER TABLES. 11

- BIST and COMMERCIAL INSTRUCTOR, being a full and accurate treatise on the Exchanges, Monies, Weights and Measures of all trading nations and their colonies, with an account of their Banks, Public Funds, and Paper Currencies, 2nd edition, 2 vols in I, stout 4to, 1.00, London, for the author, 1821.
- 265 Webb (W.) Tables of Products for performing Multiplication and Divisions of Numbers with the greatest ease, certainty and dispatch, 334 pp, 8vo, calf, 75c, London, about 1760.
- 266 Maxted (Henry) Philomath, COMPANION for ARTIFICERS and MATE for MEASURERS, etc, fitted to the meanest capacity and published for the general good, a scarce and highly interesting little old work for architects and others, square 12mo, 1.00, on London Bridge, 1711.
- 267 Long (J.) Tables for ascertaining the strength of Spirits, with Sikes Hydrometer, etc, 8vo, half calf, 30c, London, 1831.
- 268 Hoppus's Practical Measurer made easy, etc, etc, tall 8vo, cloth, 6oc, 1841.
- 269 Johnston (J.) The Practical Measurer, or Builder's and Contractor's Assistant, containing a variety of tables, memoranda, etc, post 8vo, calf, 40c, 1871.
- 270 Frich (H.) Calculations of the Prices of Sawn Wood, showing the cost of English Cubic Feet, I to 165, etc, royal Svo, cloth, 30c, London, 1869.
- 271 Hirsch (M.) Integral Tables, or a collection of Integral Formulæ, 8vo, boards, 75c, 1823.
- 272 Symons (W.) Practical Gager, or the Young Gager's Assistant, etc, 312 pp, post 8vo, calf, 35c, 1888.
- 273 Newton (Sir Isaac) Tables for Renewing and Purchasing the Leases of Cathedral Churches and Colleges, Land and Houses, etc, at the Rose, 1742; ASHLEY'S the MONEY'D MAN'S POCKET-BOOK of Simple Interest, exactly computed, etc, at the Rose, 1742; on the title will be seen the aut. of Ashley, the two in one, a scarce little volume, 12mo, calf, 75c.
- 274 Haviland's (Jas.) SCIENTIFIC ADVISER, containing tables of specific gravities of all substances, their superficial and solid contents, old and new weights and measures, etc, etc, 8vo, beards, 75c, London, 1826.
- 275 (Cove (L. H.) Coal Factor's Assistant, a series of tables, small 4to, 25c, London, 1832.
- 277 Chambers' Mathematical Tables, consisting of Logarithmic, Nautical and other tables, new edition, 404 pp, post 8vo, cloth, 60c, 1870.
- 278 Haviland's (Jas.) Tables of Gravities of all Substances, their superficial and solid contents, LAND MEASURING, old and new weights and measures, tables of Interest, etc, 8vo, cloth 292 King (J.) TABLES of INTEREST, 8vo, cloth, boards, 75c, John Weale, 1846.

6

- 264 Kelly (P.), LL.D., The UNIVERSAL CAM- 279 Sansum (O. B.) Tables in Dollars and Cents from 6 and 7 per cent. from 1 to 10.000. and from one to 12 months, 8vo, half calf, 40., Montreal, 1857.
 - 280 Preston's Tables of Interest, etc. 8vo. calf, 75c, New York, 1828.
 - 282 Julian (E.) Laterest Tables, 5 to 10 per cent, and from 1 cent to 10,000, Svo, cloth, 40c. 1878.
 - 283 Moor's (R.) Accurate and Compendious . Tables of Interest, etc, on 47 ENGRAVED PLATES, 1751; also THE STOCKS, examined and compared, or Guide to Purchasesr in the Public Funds, by W. Fairman, in 1 8vo vol, half calf, 60c, 1802.
 - 284 Reed (W.) Improved Tables of Gain and Discount, shewing profits from 21 to 50 per cent. on prime cost of goods at any price from one penny to £2,000, including English and Irish money, etc, stout 8vo, 60c, London, 1806.
 - 285 Chase (E.) Tables of British Sterling, etc. reduced to dollars and cents, with advance thereon from five to one hundred per cent, oblong 8vo, half calf, 40c, Boston, 1854.
 - 286 Laurie's (J.) Tables of Simple Interest at 5 to 91 per cent., and one day to 100, and one month to twelve, with copious tables of Brokerage, etc, 8vo, cloth, 50c, London, 1842.
 - 287 Schultz (C. W.) UNIVERSAL DOLLAR TABLES, 4to, cloth, 40c, 1874.
 - 288 Newman (S.)' of Lloyds, COLLECTION of MERCANTILE TABLES, new and approved method, by which simplicity, accuracy, and expedition are attained, and adapted for Public Offices, Bankers, Merchants, Lawyers, etc, royal 8vo, half calf, 60c, London, for the Author, n.d.
 - 289 Walford (Cornelius) INSURANCE GUIDE and HAND-BOOK, a Guide to the principles and practice of Life Assurance, and a HAND-BOOK OF THE BEST AUTHORITIES OF THE SCIENCE, etc., including a chapter of Life Assurance as an investment, 2nd edition, 422 pp, 8vo, cloth, 40c, London, 1867.
 - 290 Bewley (J.) Decimal and Interest Tables, calculated at 5 per cent. from one day to three hundred and sixty-five, and from one month to twelve months on from one to forty thousand pounds, with Tables of Commission from oneeighth per cent. to five per cent., thick 8vo, cloth, 1.00, London, 1854.
 - 291 Inwood (W.) Tables for the purchasing of estates, with Smart's five tables of compound interest, etc, thick post 8vo, cloth, 75c, London, 1875.
 - 25c, London, 1796.

IR. at :11 tee nr's AL fic ith 34. lid VO. les, ioc, and inly Ex les. ind. ion. oth, the by a etc, re heir th a hor. 35c, ant. and calf, es of the ved, tree, Disunar ator, atta. , of etc,

ARTS AND MANUFACTURES, CHEMISTRY, ETC.

- ing at one view the interest of any sum from I to 365 pounds, etc., etc., the 17th edition, thick Svo, cloth, 60c, Liverpool, n.d.
- 294 Evans (I.) TABLES of DISCOUNT on a new and comprehensive plan, etc, from one penny to forty shillings, and from one pound to a thousand, 4to, half calf, 50c, London, 1837.
- 295 Royle (W.) The Laws Relating to English, and Foreign Funds, Shares and Securities, the Stock Exchange, its usages and the Rights of Vendors and Purchasers, with 400 references to Acts of Parliament and decided cases and an analytical index, 8vo, cloth, 50c, London, 1875.
- 296 Thomas (W. H.) INTEREST TABLES from I to IOO days and from three per cent. per annum, by eighths per cent. calculated by decimals, oblong, 4to, cloth, 50c, London 1851.
- 297 Willey (Nathan) Actuary, TREATISE on the PRINCIPLES and Practice of Life Assurance. third edition, revised and enlarged, 8vo, cloth, 65c, 1880.

Being an Arithmetical Explanation on the computation involved in the Science of Life Contingencies, with valuable tables for reference.

298 Skinner's (T.) . Stock Exchange Year Book, 1876, 261 pages relating to finance, etc., 350.

293 King's (Jos.) TABLES of INTEREST, show | 299 Caton (Seymour) How to do Business, a compendum of valuable essays, principles and maxims, on self-education and advancement, in 12 parts, 8vo, sewn, 6oc, pub at 2.50.

30

31

of

81]j

b

3

- 300 Hill (Britton A.) Absolute Money, A New System of National Finance under a Co-operative Government, 8vo, cloth, 5oc, St. Louis, 1875.
- 301 Hankey (Thos.) The Principles of Bank. ing, its utility and economy, with remarks on the working and management of the Bank of Eng. land, 3rd edition, Svo, cloth, 75c, London. 1873.
- 302 Del Mar (Alex.) MONEY AND CIVILIZATION or a History of the Monetary Laws and Systems of Various States since the Dark Ages and their influence upon civilization, 431 pp, 8vo, cloth, 1.25, 1886.
- 363 Gray (John) LECTURES on the NATURE AND USE OF MONEY, delivered before the members of the Edinburgh Philosophical Institution, 1848, 8vo, cloth, 75c, Edinburgh, 1848.
- 304 Hayes (R.) Interest at one view calculated to a farthing, also a concise table whereby to cast up salaries and wages speedily and others of great use in receiving and paying morey. 347 pp, small, 8vo, calf, scarce, 75c, At the Engel in Cornhill, 1746.

ARTS AND MANUFACTURES, CHEMISTRY, CARPENTER'S WORK, ETC.

- Cyclopædia of USEFUL ARTS, MECHANICAL and CHEMICAL MANUFACTURES, MINING and ENGINEERING, including an introductory Essay on Invention, edited by CHARLES TOMLINSON, F.C.S., illustrated by upwards of 60 STEEL ENGRAVINGS, and above 3,000 ENGRAVINGS on Wood, 6 vols, imp 8vo. half morocco, marbled edges, A CAPITAL COPY of an INTERESTING and USEFUL WORK, 6.75, London, Virtue, 1866. 305
- Ure's (Dr.) Dictionary of Arts, Manufactures and Mines, containing a clear exposition of their PRINCIPLES and PRACTICE, new edition, edited by ROBERT HUNT, F.R.S., with about 2,000 engravings on wood, 8 thick 8vo vols, cloth, 3.25, Longman's, 1860. 306

A CHEAP COPY of this VALUABLE WORK which was published at about FOUR POUNDS. Its innumerable articles contributed by men of the highest standing in science, chemistry and manufactures. cover the whole realm of industrial knowledge, and will be read with interest and consulted with profit for many years to come.

ANOTHER, an earlier edition, illustrated by 1,240 WOOD ENGRAVINGS, 1334 pp, stout 8vo, half calf, 1.00, London, 1839. 307

Muspratt's (Dr Sheridan) CHEMISTRY, THEORETICAL, PRACTICAL and ANALYTICAL, as applied and relating to the ARTS and MANUFACTURES, with upwards of 30 fine steel portraits of eminent men of science, and many hundred illustrations in the text, 2 imp 8vo vols, of about 1,000 pp each, half morocco, marbled edges, 5.75, Edinburgh, n.d. 308

BIOGRAPHICAL PORTION, complete in 6 vols, 4to, cloth, binding is a bit worn, but is otherwise nice and clean, 1.50, Bradbury & Evans, 1856.

, a

nd

in

êw

Ive

ık-

he

1g.

)n,

ON

ms

leir

th,

RE

the

In-

48.

to

sof

347

lin

.'C.

AL

on

60

V0,

PUL

305

)n-

ted

Svo

306

s in-

ires,

with

OD

307

AL

vith

Ired

cco,

308

310 Arts and SCIENCES, with numerous illustrations, 8 vols, 4to, cloth, 2.25, Bradbury & Evans, 1859.

In the BIOGRAPHICAL DIVISION will be found the history of all the great Public Events, and the Religious, Moral and Intellectual History of every state, as detailed in the lives of its eminent citizens. The ARTS and SCIENCES em brace the history of every branch of Physical Science, and ts application to Productive Industry.

- 311 Cassell's Technical Educator, an ENCYCLO-PEDIA of TECHNICAL EDUCATION, many hundred illustrations, 4 vols in 2, 4to, half bound, 2.75.
- 312 Cooley (J. A.) and J. C. Brough, CYCLO-PÆDIA of PRACTICAL RECEIPTS, Processes and Collater. 1 Information in the Arts, Manufactures, Professions and Domestic Economy, 4th edition, revised and enlarged, a stout 8vo vol, cloth, 1393 pp of valuable information, 1.50, London, 1864.
- 313 Circle of the SCIENCES, with introductory discourse on the objects, pleasures and advantages of science, by HENRY LORD BROUGHAM fine portrait of this well-known politician and man of science, and another of Professor Owen, 2 stout imp 8vo vols, half calf, of about 1,000 pp each, 2.25, London, n.d.

Covers the whole REALM of KNOWLEDGE in experimental, Covers the whole REALM OF KNOWLEDGE IN EXPERIMENTAL, chemical, mathematical and mechanical philosophy, as well as the natural history of the animal, vegetable and mineral kingdoms, geography and geology. With some THOUSANDS OF ILLUSTRATIONS. It is exactly the work in cost, condition and contents for a young man thirsting for knowledge, who may not have enjoyed the advantages of a college calcutation. a college education.

- 314 Berzelius TRAITE de CHIMIE MINERALE, VEGETALE, et ANIMALE, Traduit par A. J. L. Jourdan, 8 vols, in 4 stout 8vo, calf, a sound copy of this celebrated work, 1.75, Bruxelles, 1840.
- 315 Biot (J. B.) TRAITE de PHYSIQUE EXPERI-MENTALE et MATHEMATIQUE, plates, 4 vols, 8vo, half calf, 1.25, Paris, 1816.

A Celebrated FRENCH ASTRONOMER, OFTICIAN and NATURAL PHILOSOPHER. The above is the best known works on Experimental Physics and Mathematics. On each title page will be found the Autograph of John HERA-PATH, another well-known Natural Philosopher, and Editor of the Celebrated Railway Journal.

- 316 **Peclet** (E.) Traite Elementaire de Physique. 3 vols, 8vo, including the ATLAS of PLATES, half calf, 1.00, 1847.
- 317 Miller's (Dr. W. Allen) LL.D., ELEMENTS of CHEMISTRY, theoretical and practical, Vol I, CHEMICAL PHYSICS; Vol 2, INORGANIC and Vol 3, CHEMISTRY, 3 stout 8vo vols, cloth, 3.25, Longmans, 1867.

- 309 English Cyclopædia, the VALUABLE 318 Matteucci (Carlo) Lezioni Di Fisica, 544 pp, also the Atlas of Plates, 2 vols, 8vo, half calf, 65c, Pisa, 1847.
 - 319 Rose (H.) PRACTICAL TREATISE of CHEMI-CAL ANALYSIS, including tables for calculations in analysis, translated with notes and additions by A. NORMANDY, 2 stout 8vo vols, half calf, marbled edges, 1.50, Londan, 1849.
 - 320 Thorpe (T. E.) Ph.D., and Pattison Muir, QUALITATIVE CHEMICAL ANALYSIS and Laboratory Practice, colored front and illustrations, post 8vo, cloth, 6oc, Longmans, 1874.
 - 321 Cooke (Josiah) of Harvard University, PRINCIPLES of CHEMICAL PHILOSOPHY, woodcuts, 576 pp, crown 8vo, cloth, 75c. Macmillan, 1874.
 - 322 Naquet (Monsr. A.) PRINCIPLES of CHEM-ISTRY, founded on modern theories, translated by CORTES and revised by Dr. STEVENSON, 848 pp, stout 8vo, cloth, 1.25, London, 1868.
 - 323 Watts (Henry) DICTIONARY of CHEMISTRY, and the allied branches of other sciences, the first two vols of above 1,000 pp each, comprising letters A. to G. Y. T., 2.25, cost about £2 10s, London, 1864.
 - 324 Bloxham's (C. L.) CHEMISTRY, Inorganic and Organic, with experiments, and 295 illustrations, 700 pp, stout 8vo, cloth, 1.25, 1873.
 - 324 **Turner's** Elements of Chemistry, seventh edition by LEIBIG and GREGORY, 1,270 pp, 8vo, 6oc, London, 1842.
 - 326 Watson's (Dr. Richard) CHEMICAL Essays, 5 vols, 12mo, half calf, scarce, 1.00, Cambs, 1781.
 - 327 Proceedings of the American Association for the Advancement of Science, 33rd meeting, Philadelphia, 1884, 2 very thick 8vo parts, comprising upwards of 700 pp of scientific reading, 75c.

Contains learned articles on Physics, Mechanical Science, Biology, Anthropology, etc., etc.

- 328 Year Book of FACTS in SCIENCE and ART, illustrated with portraits of men of eminence, and other engravings, from 1843 to 1854, also 1856, 13 vols, post 8vo, cloth, 1.75.
- 329 British Almanac and COMPANION, 1830 to 1834, and from 1836 to 1842, also the years 1844, '46, '47 and '48, together 16 vols, post Svo, cloth, a valuable publication, 1.50 the lot, 1830-48.

Two capital publications. The one traversing the whole field of politics and finance, and the other is a progres-sive history and a record of everything connected with the arts and science. A volume for 1871 which we in-clude contains a steel portrait of Prof. T. H. Huxley.

330 Benjamin (Park) M. D., The AGE of ELECTRICITY from Amber-Soul to Telephone, illustrated, crown 8vo, cloth, 1.25, New York, 1886.

The myth of the amber-soul, discoveries of the early experimenters, gauging the lightning, electricity in harne-s, its application to medicine, etc., etc.

- 333 Lodge (Oliver J.) LL.D., MODERN VIEWS | 348 Tredgoid (Thos.) ELEMENTARY PRINof ELECTRICITY, with illustrations, crown 8vo, cloth, 75c, Macmillan, 1889.
- 334 Jenkins (F.) ELECTRICITY and MAGNET-ISM, with illustrations, post 8vo, cloth, 60c, Longmans, 1873.
- 335 Lloyd (Humphrey) D.C.L., A TREATISE on MAGNETISM, general and terrestrial, Svo, cloth, 1.00, Longmans, 1874.
- 336 Frith's (Henry) The Marvels of Astronomy, with many illustrations, crown 8vo, cloth, 35c, London, Ward & Lock.
- 337 Marvels of Invention and Scientific Puzzles, being a popular account of many useful and interesting inventions and discoveries, with many illustrations, crown 8vo, cloth, 35c, same admirable series.
- 338 Frith (H.) Marvels of Electricity and Magnetism, same series, 35c.
- 339 Encyclopædia Metropolitana, the In-PORTANT VOLUME, comprising the MIXED SCIENCES, 824 pp, 4to, cloth, 1.00, London, 1830.

Contains ELECTRO-MAGNETISM by PRTER BARLOW, ELEC-TRICITY by FRANCIS LUNN, GALVANISM by P. M. ROGET, who was at that time secretary to the Royal Society, also HERCHEL on HEAT and SOUND, etc.

- 340 Pope (F. S.) Evolution of the Electric Incandescent Lamp, Svo, cloth boards, 30c, New York, 1894.
- 341 Prescott (G. B.) The SPEAKING TELE-PHONE, ELECTRIC LIGHT, and other recent electrical inventions, numerous illustrations, 616 pp. 8vo, cloth, 1.00, Appleton & Spar, 1879.
- 342 Ware's (Isaac) and Inigo Jones, COMPLETE BODY of the ARCHITECTURE, adorned with plans and elevations from original designs, a stout and tall folio, calf, 2.75, London, 1756.
- 343 **Priestley** (Dr. Joseph) A Familiar Intro-duction to the Theory and Practice of Perspective, with numerous folding plates, 8vo, calf, scarce, 75c, 1770.
- 344 Leslie (John) Short Account of Experiments depending on the relations of Air to Heat and Moisture, 8vo, boards, scarce, 75c, Edinburgh, 1813.
- 346 Burn (R. Scott) ORNAMENTAL DRAWING, ARCHITECTURAL DESIGN, with notes, historical practice, and upwards of 200 illustrations, 8vo, cloth, 40c, London, Ward & Lock.
- 317 Newland's (Jas.) CARPENTER's and JOINER'S ASSISTANT, a comprehensive treatment on the SELECTION , PREPARATION and STRENGTH of MATERIALS, and the Mechanical Principles of Framing with their application in Carpentry, Joinery, and Hand-Railing, also a complete course of instruction in Practical Geometry, Geometrical Lines, Drawing, Projection, and Perspective and an Illustrated Glossary of Terms used in Architecture and Building, with an extensive series of plates, and many hundred engravings on wood, imperial 4to, half calf. 2.75, Blackie & Son, 1862.

CIPLES of CARPENTRY, etc, including the nature and strength of timber, etc, new edition by PETER BARLOW, port, and numerous folding plates, 4to, half morocco, gilt top, 2.50, London, 1840.

Ori

0

The w

An

360 7

PR

of

sev M

lar

an

inc ste

ha

Th

will 1

write

ing,

teres

descr

EDI

362

T

St

iı

363

6

7

364

36

36

3

361

- 349 Soane (John) SKETCHES in ARCHITECTURE containing plans and elevations of cottages, villas, and other useful buildings, with characteristic scenery, 43 plates, with descriptive letter. press, London, 1793 ; WOOD (John) A SERIES of PLANS for COTTAGES of the Laborer, etc, 30 plates, folio, with letterpress descriptions, Bath, 1788 ; Wood (John) DESCRIPTION of the Hor BATH at BATH, plates, printed for the author, all in one tolio vol, morocco extra gilt, 1.75, scarce.
- 350 Frice (Francis) TREATISE on CARPENTRY, containing the most concise and authentic rules of that art in a more useful and extensive method than has been made public, with plates, 4to, scarce, 75c, 1735.
- 351 Wilson (W. Carns) Helps to the Building of Churches and Parsonage Houses, containing plans, elevations, etc. 4to, London, 25c, 1835.
- 352 Hoskin's (W.) TREATISES on ARCHITEC-TURE and BUILDING from the Encyclopædia Britannica, with 26 engravings, 4to, cloth boards, 75c, 1832.
- 353 Loudon's (J. C.) ENCYCLOPÆDIA of COT-TAGE, FARM and VILLA ARCHITECTURE and FURNITURE, new edition, with about 2,000 illustrations and a glossarial index,, 1317 pp, thick Svo, substantially bound in green calf gilt, marbled edges, 2.25, Longman's, 1846.

A CAPITAL VOLUME with hundreds of designs for A Carrier to boost with numeries of and farm, far-meries, country inne, public houses, parochial schools, including the fittings up, fixtures and furniture, offices. garden scenery, including gothic and other styles of architecture.

- 354 Dessables (M.) Nouveau Manuel du Tourneur ou traite complet et simplifie de cet Art, with several large folding plates, also the 4to atlas of plates, 3 vols, 12mo, half calf, 1.00, Paris, 1839.
- 355 Menuisier Eveniste et Layetier, folding plates, 2 vols, 12mo, half blue morocco, 60c, 1843.

NATURAL PHILOSOPHY, MECHANICS, ENGINEERING, ETC.

- 356 Engineer and MACHINISTS' ASSISTANT, being a series of Plans, Sections and Elevations of Steam Engines, Spinning Machines, Mills for Grinding, etc., etc., with upwards of 100 plates, illustrating machines and machinery of every description, 2 vols, 1 of the text the other of plates, imp 4to, 1.75, Edinburgh, Blackie & Son, 1847.
- 357 Kurn (R. Scott) The Steam Engine, its history and mechanicism, descriptions and illustrations of the stationary locomotive and marine engines. numerous illustrations, 8vo, cloth, 40c. London. Ward So Lock.

Original Manuscript (An) on the ELEMENTS of GEOMETRY, 125 ll of thick paper containing many hundred theorems, problems and diagrams, large folio, bound in limp vellum, 2.50. 358

On the title we are informed that T. RANDALL begun this book July 8th, in the year 1767. The whole work is in the same hand and is very nicely executed.

An Interesting and CURIOUS OLD MANUSCRIPT WORK on the MATHEMATICS, the tops of many of the pages being decorated with birds, etc, 181 ll, written on both sides of the paper, folio, vellum, 2.50, Robert Densen, his book, November 6, 1770. 359

- 360 **Treadgold's** (Thos.) PRINCIPLES and PRACTICE and Explanation of the MACHINERY of LOCOMOTIVE ENGINES, in operation on the several lines of railway; also STATIONARY and MABINE ENGINES, text and plates forming four large 40 vols, cloth, 3.75, 1851.
- 361 Another copy of MARINE ENGINES and MACHINERV, used in Steam Navigation, including Examples of British and American steam vessels, TEXT and PLATES, 2 imp 4to vols, half calf, 2.00, 1851.

The above, as well as many items in this catalogue, will be interesting for all time, as authors and others who write on the progressive history of mechanics, engineering, etc., are under the necessity of consulting these in teresting and scarce old works. In short they may be described as the TOOLS, SQUARES and COMPASSES of the EDITOR and MAN OI SCIENCE.

Ł

of

to

0.

ю,

a

01

ry

101

is.

ta.

ne

th,

- 362 **Beckmann's** (John) HISTORY of INVEN-TIONS, 3rd edition, enlarged by the addition of several new articles, the large type 8vo edition, in 4 vols, half calf, 1.25, 1817.
- 363 — Another edition in Bohn's Standard Library, revised by Dr. W. FRANCES and W. GRIFFITH, 2 portraits, 2 vols, crown 8vo, cloth, 75c.
- 364 **Rankine** (W. J. Macquorm) C. E., LL.D., CYCLOPÆDIA of MACHINE and HAND TOOLS, a series of plans, sections and elevations of the most approved tools for working in iron, wood and other materials, from WORKING DRAWINGS by the MAKERS, and including the strength and qualities of wood and metals, the manufacture of iron and steel, the puddling of iron, etc, stout imp 4to, half morocco, 4.25, London, 1869.
- 365 **Ryde** (E.) and Professor Donaldson, A GENERAL TEXT BOOK, for the use and constant reference of architects, engineers, surveyors, solicitors, auctioneers, land agents and stewards, etc, etc, a valuable work of nearly 1,100 pp, with folding flates an *i* illustrations, 8vo, cloth, 1.50, London, John Weale, 1853.
- 366 **Galloway's** (E.) History of the Steam Engine, from its earliest invention to the present time, with 140 illustrations, 8vo, cloth boards, a scarce and interesting old work, 6oc, London, 1828.
- 367 Lardner (Dr.) The Steam Engine Explained and Illustrated, with historical sketch of its invention, plain maxims for railway speculators, etc, etc, with plates, 8vo, cloth, 6oc, *Philadel phia*, 1852.

- 368 **Bourne** (John) **TREATISE** on the STEAM ENGINE, in its application to mills, steam navigation and railways, by the Artizan Club, *illustrated by 30 plates and 340 engravings on wood*, 258 pp, 4to, cloth, 75c.
- 369 **Practical Mechanic** and Engineers' Magazine, *numerous illustrations*, 5 vols, 4to, cloth, 1.75, Glasgow, 1842-44.

Devoted to the history and exposition of engineering, mathematics and general science, and is a very cheap lot.

370 **Rennie** (Sir John) AUTOBIOGRAPHY, comprising the HISTORY of his PROFESSIONAL LIFE, together with reminiscences dating from the commencement of the century to the present time, port, Svo, *cloth*, 1.00, Spon, 1875.

PRESIDENT of the INSTITUTION of CIVIL ENGINEERS, and one of the most eminent engineers of our time. The Architect of London bridge over the Thames, the Sheerneesd dockyards and the drainage of the Lincoinshire fens. Sir JOHN was a MECHANIC, and would have looked with scorn at the walls of the MECHANICS' INSTITUTES of this country, decorated as they are with all the latest novels.

- 371 Watt (James) LIFE, with selections from his correspondence by J. P. Muirhead, *illustrations*, 424 pp, post 8vo, cloth, 6oc, 1859.
- 372 Arago's (M.) HISTORICAL ELOGE of JAS. WATT, translated by J. P. Muirhead, with his torical disquisition by Lords BROUGHAM and JEFFREY, and speeches delivered in Westminster Abbey, 8vo, margin of portrait a little waterstained, otherwise on LARGE PAPER and UNCUT, 75c, John Murray, 1839.

Only a few copies so printed. WATT may be considered the GREATEST on the ROLL of ENGLISH INVENTORS.

- 373 Another copy on ordinary paper, portrait, 8vo, cloth, 5oc.
- 374 **Bonnefoux** (Cap.) DICTIONNAIRE de MARINE a VOILES et a VAPEUR, 771 pp, large imp 8vo, half calf, 75c, Paris, n.d.
- 375 **Shipbuilding** TRAITE du NAVIRE de sa CON TRUCTION, et de ses Mouvemens par M. BOUGNER, 641 pp, with 12 folding plates, 4to, calf, 1.00, Paris, 1746.
- 376 **Deschauel** (A Privot) ELEMENTARY TREATISE on NATURAL PHILOSOPHV, translated and edited with extensive additions, J. D. EVERETT, 'M.A., D.C.L., illustrated by 760 engravings on wood and 3 colored plates, 1069 pp, very thick 8vo, cloth, 2.50, London, 1875.

NATURAL PHILOSOPHY, MECHANICS, ENGINEERING, Etc.

- Mathematician (The) edited by DAVIES, RUTHERFORD and FENWICK, complete in 3 vols, 8vo, cloth, a nice clean set, 4.25, originally pub. at three pounds seven shillings, E. & F. N. Spon, 1856.
- The Ladies, and LADIES and GENTLEMAN'S DAIRY, containing NEW IMPROVEMENTS IN ARTS AND SCIENCES, etc., for the amusement and instruction of students in mathematics, and interesting to all persons engaged in that delightful pursuit, from 1816 down to 1871, COMPLETE, with the exception of the years 1830 and 1866, in parts, each part containing from 40 to 90 pp of curious and out of-the-way information relating to the calendar, original poetry, rebuses, enigmas, etc., a scarce and interesting lot, 10.50. 378

Leybourne's (Thomas) MATHEMATICAL REPOSITORY, New Series, 6 vols, 8vo, half calt, one cover loose, 10.75, 1806-1835. 379

A COMPLETE SET of this EXCEEDINGLY SCARCE SERIES. Comprising mathematical questions and solutions, original essays by eminent men, mathematical memoirs.

380 **Hagenu** (A.) DESCRIPTION du Canal JONC-TION de la MEUSE AU RHIN, 551 pp, 4to, half calf, with the bookplate of the Institute of British Architects, 1.50, Paris, 1819.

16

- 381 Exley (Thos.) PRINCIPLES of NATURAL PHILOSOPHY, or a new Theory of Physics, founded on gravitation and applied in explaining the Phenomena of Chemistry, Electricity, Galvanism, Magnetism, etc., etc., 8vo, cloth, 75c, London, 1829.
- 382 Hogg (Jabez) F.L.S., ELEMENTS of EX-FERIMENTAL and NATURAL PHILOSOPHY, numerous illustrations, crown 8vo, cloth, 50c, H. G. Bohn, 1861.

A familiar and easy introduction to the study of the Physical Sciences, embrucing Animal, Mechanics, Pneumatics, Hydrostatics, Hydraulics, Acoustics, Optics, Caloric, Electricity, Voltaism and Magnetism.

- 383 Playfair's (John) Outlines of Natural Philosophy, being Heads of Lectures Delivered in the University of Edinburgh, 2 vols, 8vo, cloth boards, 6oc, 1819.
- 384 Rowning (J.) Compendious System of Natural Philosophy, numerous folding plates of diagrams, etc., 2 thick vols, 8vo, boards, 75c, 1779.
- 385 Robinson's (J.) Elements of Mechanical Philosophy, Vol I, comprising DYNAMICS and ASTRONOMY, 696 pp, thick 8vo, cloth boards, 60c, Edinburgh, 1804.
- 386 Leslie's (John) Elements of Natural Philosophy, Vol I. Mechanics and Hydrostatics, 8vo, cloth boards, 40c, Edinburgh, 1823.
- 387 Peck's (W.) Introductory Course of Natural Philosophy, edited from Ganot's Popular Physics, numerous illustrations, post 8vo, half calf, 6oc; 1871.
- 388 Norton (S. A.) Elements of Natural Philosophy with 350 illustrations, post Svo, half calf, 60c, 1870.
- 389 Perry (Prof. John) SPINNING TOPS, The Operatives Lecture of the British Association at Leeds, 1890, numerous illustrations, post 8vo, 35c, 1890.

- 390 **Enfield's** (W.) Institutes of Natural Philosopy, Theoretical and Practical, with appendix by Webber, 395 pp, 4to, calf, last leaves injured by a nail, 75c, early Boston edition, 1820.
- 391 Marcet's Conversations on Natural Philosophy, illustrated, post 8vo, cloth, 35c, 1839.
- 392 Wesley (John) Survey of the Wisdom of God in the Creation, or a COMPENDIUM of NATURAL PHILOSOPHY, 5 vols, 12mo, calf, a sound set, 1.25, New Chapel City Road, 1784.
- 393 Bridge Building, TRAITE de La CON-STRUCTION DES PONTS PAR M. GAUTHEY, numerous folding plates of bridges, etc., 2 vols, 4to, MEMOIRES SUIR LES CANAUX de NAVIGA-TION et Particulierement sur le Canal du Centre, Autrefoir Canal du Charolais, with folding plazes, together 3 4to vols, sewn, 1.75, Paris, Didol, 1813-1816.

Eminent French Engineer. The above works on the construction of Bridges and Navigable Canals being well known, He superintended the construction of the CANAL DU CENTRE.

- 394 **Slater's** (R.) Telegraphic Code, to Ensure Secrecy in the Transmission of Telegrams, post 8vo, cloth, 65c, pub at seven shillings sixpence, London, 1870.
- 395 Simms (F. W.) Treatise on Mathematical Instruments employed in surveying, levelling and astronomy, explaining their construction, adjustments and use, 8th edition, 8vo, cloth, 40c, 1850.
- 396 Kentick (Thos.) Treatise on a Box of Instruments, and the Slide-Rule for the use of gaugers, engineers, seamen and students, post 8vo, cloth, 40c, 1852.
- 397 Quackenbos (G. P.) NATURAL PHILOS-OPHY, embracing the most recent discoveries in the various branches of physics, and exhibiting the application of scientific principles in everyday life, numerous illustrations, 455 pp, crown 8vo, cloth, 4oc, Appleton, 1888.

Adapted to use with or without apparatus and accompanied with full descriptions of experiments and practical exercises. Ana

Ed

Sc]

401

str

Su

402

E

m

811

D

C

CI

fe

t

U

J

1

404

I

1

40!

40

NATURAL PHILOSOPHY, MECHANICS, ENGINEERING, ETC.

Analyst (The) a MONTHLY JOURNAL of PURE and APPLIED MATHEMATICS, edited by J. E. HENDRICKS, complete and clean in the original parts as issued, from its commencement in January, 1874, to its termination in 1883, imp 8vo, 7.25, Des Moines, Iowa, 1874-83.

Educational Notes and QUERIES, a Medium of Intercommunication for Teachers, edited by W. D. HENKLE, from its commencement in January, 1875, to December, 1880, 10 parts, 8vo, complete and clean, 3.25, Salem, Ohio. 399

School Visitor (The) DEVOTED to PRACTICAL MATHEMATICS, Examination Work, Notes, Queries and Answers, edited by JOHN S. ROGER, complete and clean, in parts, from its commencement in 1880 down to 1893, 8vo. 5.50, Versailles, Ohio, 1880-93. 400

struments used in American Engineering and Surveying, post 8vo, sewn, 20c, 1868.

d ib.

77

g

10-

at he

us

88.

78

W

79

ind

ilo.

idix

in.

\$20.

ulo-

1 of

lf, a

784.

'ON-

IEY,

vols.

IGA-

ntre,

ding

'aris,

1 the

r well

ANAL

isure

post

ence,

stical

lling

tion.

loth,

of In-

use of

post

ILOS

ies in

biting

very

rown

ccom prac-

of

2.

- 402 Adams (G.) Geometrical and Graphical Essays descriptive of mathematical instruments used in geometry, civil and military surveying, levelling and perspective.
- 403 Iron and Steel Maker, being DETAILED DESCRIPTIONS of the various processes for the conversion of the ores of iron into pig iron, or cast ivon, wrought or malleable iron, the different qualities of steel, with descriptions of the various furnaces, appliances and machines, with folding plates and woodcuts, edited by F. Joynson, crown 8vo, cloth, 1.00, London, 1892.
- 404 Overman (F.) The MANUFACTURE of IRON and Steel in all its various branches, with 150 illustratious on wood, 8vo, cloth, 1.00, 1854.
- 405 Mushet (David) PAPERS on IRON and STEEL, practical and experimental, a series of papers communicated to the Philosophical Magazine, with copious illustrative notes, upwards of 900 pp, and several folding plates, stout 8vo, cloth, 1.25, London, John Weale, 1840.
- 406 Osborn (H. S.) LL.D., The METALLOGY of IRON and STEEL, theoretical and practical in all its branches, with special reference to American materials and processes, illustrated by 250 engravings on wood, and 6 folding plates, 941 pp, stout 8vo, cloth, 2.00, 1869.
- 407 Phillips (J. A.) ELEMENTS of METAL-LURGY, a practical treatise on the art of extracting metals from their ores, illustrated by numerous engravings on wood, 764 pp, 8vo, cloth, 2.50, London, 1874.
- 408 Smee (A.) F. R.S., Elements of Electro-Metallurgy. 2nd edition, enlarged and illustrated, 8vo, cloth, 50c, London, 1843.
- 409 Ricketts (Pierre de Peyster) Ph. D. NOTES on ASSAVING, and assay schemes, 3rd edition, revised and enlarged, 8vo cloth, 1.00, New York, 1880.

- 401 Gurley (W.) Manual of the Principal In- | 410 Bodemann (The) and Brand Kerl, a treatise on the assaying of lead, copper, silver, gold and mercury, illustrated, crown 8vo, cloth, 75c, 1872.
 - 411 Report upon the Wastage of Silver Bullion in the Melter and Refiners' department of the Mint of the United States, July, 1872, 82 pp, 8vo, sewn, 25c.
 - 412 Tables of the Value of Gold and Silver per ounce Troy, at different degrees of fine ness, showing the net returns, etc, imp 8vo, cloth boards, 50c, San Francisco, 1867.
 - 413 Nevada and CALIFORNIA PROCESS of SIL-VER and GOLD EXTRACTION for general use, and for the public of California and Nevada, with descriptions of silver ores, directions for operations, etc, 309 pp, 11 engravings, 1.25, San Francisco, 1863.
 - 414 Stevenson's (Allan) Report on Illuminating Lighthouses by means of lenses, with plates, 4to, half calf, 35c, Edinburgh, 1835.

From the Commissioners of Northern Lights for PROP FESSOR WALLACE.

- 415 Smeaton and Lighthouses, a popular biography, with an historical introduction and a sequel, post 8vo, 20c, 1844.
- 416 Gregory (J.) Complete Course of Engineering, comprising Plane Trigonometry, Surveying, and Levelling, etc, etc, 2 vols in 1 stout 8vo, cloth, 1.00, London, n.d.
- 417 Delaistre (J. R.) ENCYCLOPEDIE de L'IN-GENIEUR OU DICTIONAIRE des PONTS et Chauses, 6 vols in 3, 8vo, nicely half bound calf, marbled edges, 1.00, Paris, 1812.
- 418 Blenkarn (John) PRACTICAL SPECIFICA-TION of WORKS executed in ARCHITECTURE, CIVIL and MECHANICAL ENGINEERING, and in ROAD MAKING and Sewering, to which are added a series of practical useful agreements and reports, with numerous plates, 8vo, cloth, 1.50, Spon. 1865.
- 419 Sganzin (M. I.) Elementary Course of Civil Engineering, from the 3rd French edition, with notes and applications adapted to the United States, with folding plates, 8vo, cloth boards, a little soiled, 60c, 1828.

NATURAL PHILOSOPHY, MECHANICS, ENGINEERING, ETC.

- CIVIL ENGINEERING for the use of Cadets of the United States Military Academy, 6th edition, with numerous illustrations, 8vo, half morocco. 1.00, 1855.
- 421 -- Another, the 4to edition, edited by Prof. Barlow, cloth, 60c, 1838.
- 422 Brees (S. C.) A GLOSSARY of CIVIL EN-GINEERING, comprising its theory and modern practice, illustrated by numerous engravings, 8vo, cloth, 75c, London, 1841.
- 423 Hebert (Luke) ENGINEERS' and MECHAN-ICS' ENCYCLOPEDIA, illustrated by about 2,000 engravings of important works of the past and modern times in architecture, engraving and general science, 2 stout 8vo vols of 800 pp each, half calf, 1.00, London, 1836.

Will be a constant SOURCE OF PLEASURE, to those who take an interest in the progressive history of mechanical science.

- 424 Nicholson's (John) OPERATIVE MECHANIC and BRITISH MACHINEST, a practical display of the manufacturies and mechanical arts, etc, with supplement by TAYLOR, numerous illustrations, 902 pp, cloth boards, an highly interesting work for mechanics and others, 1.25, London, 1829.
- 425 Mechanic's Magazine from July 1852 to June 1857, and from January 1858 to December, 1868, numerous illustrations, inventions, and mechanical contrivances, etc, 12 stout 8vo vols. nicely half bound, 4.25.

To those interested in the HISTORY OF RAILWAYS, or indeed, in the historical development of mechanical science generally, this lot will impart endless instruction and delight.

- 426 Bourne's (John) C.E., Treatise on the Screw Propeller, with various suggestions of improvement, 243 pp. and many large folding plates, 4to, cloth, 75c, London, 1852.
- 427 Atlas of fifteen engravings to illustrate and practically explain the construction of Roofs of Iron, intended to further elucidate this particular mode of building with iron for public edifices, 4to, cloth, 50c, John Weale, 1859.
- 428 Rennie's (John) Report upon the RIVER OUZE OUTFALL Improvement, with folding plan of the Great Wash, and large folding maps of the Great LEVEL of the FENS, 4to, boards, scarce, 75c, not published, 1836.
- 429 Hart (John) Mason, PRACTICAL TREATISE on the CONSTRUCTION of OBLIQUE ARCHES, 3rd edition, with 10 plates, small folio, cloth, 75c, London, 1848.
- 430 Tableau General Numerique Par Fouds des Archives Departementales Anterieures a 1790, 260 pp, 4to, sewn, 60c, Paris Imprimerie Nationale, 1848.
- 431 Holtzapfiel (C.) NEW SYSTEM of SCALES of EQUAL PARTS, applicable to various purposes of Engineering, Architectural and General Science, 8vo, cloth, 35c, London, 1838.

420 Mahan (D. H.) ELEMENTARY COURSE of | 432 Evans (Oliver) The Young Mill-Wright and Millers' Guide, 10th edition, by Jonva, with additions, and 28 plates, 8vo, 50c, 1840.

- 433 Tredgold's Practical Essay on the STRENGTH of CAST IRON and other Metals, 4th edition, with notes and experimental researches by E. Hodgkinson, plates, 2 vols, 8vo, cloth, 1.00, pub at 24s by John Wheale, 1842.
- 434 -- Another edition, 1 vol, board. 35c, 1831.
- 435 Wood (N.) Practical Treatise on Railroads. Interior Communication, Canals, etc, with Dia. grams, 8vo, boards, 50c, 1825.
- 436 Randall (R.) Treatise on Railway Improvements, etc, etc, 8vo, cloth, 35c, 1837.
- 437 Macneill (Sir J.) LL.D., TABLES for FACILITATING the CALCULATION of EARTH WORK in the cuttings of Embankments on Railways, Canals, and other Public Works, 2nd and enlarged edition, 8vo, cloth, 1.00. Dublin, 1846.
- 438 Davy (C.) On Architectural Foundations, 179 pp, 8vo, cloth, 40c, London, 1839.
- 439 Trantwine (J. C.) New Method of Calculating the Cubic contents of Excavations and Embankments by the aid of Diagrams, 8vo, cloth, 40c, 1853.
- 440 Wood (De Volson) A Treatise on the Resistance of Materials, and an appendix on the preservation of Timber, 8vo, cloth, 75c, 1871.
- 441 Galton (Douglas) F.R.S., Report of the Works of Sewerage and Drainage proposed for the Town of Cannes, 52 pp, and 2 plates, 8vo, sewn, 25c, 1883.
- 442 Hellyer (S. Stevens) The PLUMBER and SANITARY HOUSES, a Practical Treatise on the Principles of Interior Plumbing Work, or the best means for effectually excluding noxious gases from our houses, numerous illustrations, 8vo, cloth, 1.00, London, T. B. Batsford.
- 443 Brown (Geo. P.) Sewer Gas and its Dangers, an Exposition of Common Defects in House Drainage, and Practical Information relating to their Remedy, post 8vo, cloth, 50c, 1881.
- 444 Saint Pancras, Old England, METROPOLIS LOCAL MANAGEMENT ACT, 1855, Report on Condition Anterior to 1856, WORKS EXECUTED, Improvements effected since 1856, with Observations of a comparative nature by W. BOOTH SCOTT, C.E., Chief Surveyor to the Vestry, 4to, nicely bound and lettered, limp calf, 1.00, 1890.
- 446 Water Supply of OLD LONDON, 1867, Report of the Select Committee of the House of Commons, on the East London Bills, the Operation and Results of the Metropolis Water Act, 1852, etc, 243 pp, 8vo, cloth, 50c.

NATURAL PHILOSOPHY, MECHANICS, ENGINEERING, ETC.

ling Houses, and the utilization of waste heat from open fire-places, folding and other plates, 8vo. cloth, a used copy, 40c, London, 1868.

- 448 Hood (C.) F.R.S., Practical Treatise on WARMING BUILDINGS by HOT WATER, STEAM, and HOT AIR, including ventilation, the laws of radiant and conducted heat, combustion of coal and smoke, etc, etc, 8vo, cloth, 75c, London, 1879.
- 449 Chadley (J.) Treatise on the Formation of Flues and Chimneys, etc, 8vo, cloth, 25c, London. about 1831.
- 450 Tredgold (Thos.) Principles of WARMING and VENTILATING Public Buildings, with 9 plates, 325 pp, 8vo, boards, 60c, 1824.
- 451 **Theory** and Practice of Warming and Ventilating Public Buildings, Dwelling Houses and Conservatories, 340 pp and 20 plates, 8vo, half calf, 60c, London, 1825.
- 452 Williams (C. W.) The Combussion of Coal and the prevention of smoke chemically and practically considered, with numerous illustrations, 8vo, cloth, 50c, John Weale, 1854.
- 453 Clegg (S.) Practical Treatise on the Manufacture and Distribution of Coal Gas, its introduction and progressive improvement, 4th edition, illustrated with 33 plates from working drawings, 4to, cloth, 1.25, John Weale, 1866.
- 454 Spice (R. P.) A Treatise on the Purification of Coal Gas, and the advantages of Coopers Coal-Liming Process, with illustrations, 8vo, cloth. 60c, London, E. & F. Spon.
- 455 Meyer (F. J.) and W. Wernigh, STEAM Towing on Rivers and Canals by means of a submerged cable, with large folding plates, royal 8vo, cloth, 50c, Spon, 1876.
- 456 Nicholson's (S.) The Operative Mechanic, being a practical display of the manufactures and mechanical arts of the United Kingdom, with supplement relating to British public works, with 115 engravings, 900 pp, stout 8vo, cloth boards, 1.00, 1834.
- Another copy of the supplement, 457 bound separately, with interesting old plates of lighthouses, machinery, etc. 35c.
- 458 Morrison (J.) The Influence of English Railway Legislation on Trade and Industry, with an appendix of valuable tracts and documents, 8vo, cloth, a presentation copy from the author, 50c, London, 1848.
- 459 Merrimen (Mansfield) TEXT-BOOK on the Mechanics of Materials and of beams, columns and shafts, 8vo, cloth, 75c, New York, 1885.
- 460 Chapman (W.) Treatise on the Progressive Endeavors to Improve the Manufacture of Cordage, etc, 4to, boards, 30c, 1808.
- 461 Donaldson (T. L.) Architectural Maxims and Theorems in Elucidation of some Principles of Construction and Design, 8vo, cloth, 35c, London, 1847.

447 Edwards (F.) The Ventilation of Dwel- | 462 Amateur Work, numerous folding plates and hundreds of other illustrations, A VALUABLE PUBLICATION, first series, vol 1, 4to, cloth, 1.00, London, Ward & Lock.

> 463 -- Also vol 4, 4to, cloth, 1.00.

464 ------ Also vol 1, new series, 1.00.

VALUABLE and PRACTICAL VOLUMES of constructive and decorative art and manual labor, with supplements con-taining designs and working drawings to scale for various pieces of work, useful as well as ornmental, with hundreds of illustrations.

- 465 Zwicker's Instructor for Machinists, Firemen and Steam Engineers, 16th and enlarged edition, 12mo, cloth, 25c, 1890.
- 466 Transactions of the BLITISH and FOR-EIGN INSTITUTE, portraits and other fine steel engravings, 488 pp, 4to, cloth, 1.00.

Has a fine steel portrait with memoir of J. S. Bucking-ham, founder of the institute, and whose "Recollections of an Excursion in Ireland" appears in the volume, and whose volumes relating to America are well known. Other contributions relate to the Germanic tribes and their influence on European civilization, dresses and decorations in the Middle Ages, with illustrations; Life and Character of Oliver Cromwell ; the Worship of the Serpent in the East, etc.

- 467 Davy (C.) ARCHITECTURAL PRECEDENTS' with notes and observations, the 8 parts in I stout Svo vol, with numerous plates of working drawings, cloth, 1.00, Library of the Fine Arts, 1841.
- 468 Cleve (F. Van) The English and American Mechanic, comprising a collection of over 3,000 Receipts, Rules and Tables for the use of Mechanics and Manufacturers, post 8vo, cloth, 1.00, pub 2.50, 1874.
- 469 Young (Francis) EVERY MAN his OWN MECHANIC, a complete and comprehensive guide to every description of constructive and decorative work, that may be done by the amateur artisan at home, or in the colonies, with an appendix and 850 illustrations, A USEFUL AND CAPITAL WORK, stout 8vo, cloth, 1.25, London, 1891.
- 470 Lardner's (Dr.) The Electric Telegraph Popularised, with 100 illustrations, post 8vo. cloth, 35c, London, 1855.
- 471 Young (C. D.) Treatise on Wire Fencing and Gates, with numerous illustrations, imp 8vo, 35c, 1861.
- 472 Gesner (A.) M.D., A Practical Treatise on Coal, Petroleum, and other Distilled Oils, 8vo, cloth, 60c, 1861.
- 473 Brewster (Sir David) The Kaleidoscope, its History, Theory and Construction, etc., with illustrations, crown 8vo, cloth, 50c, 1858.

A good sound set of the well-known cyclopædia edited by our author will be seen in another s ction of this catalogue.

474 Weale's Series of Works in MATHEMATICS, 5 vols, post Svo, cloth, 65c the lot.

Includes HANNS Analytical Geometry and Conic Sections Examples of the Integral Calculus and the Elements of the Differential Calculus, Rudimentary Mechanics and one other.

the ed by struc. Vol 3. rublic 6 nce. 6.75, 7 those ailway ances. TTS of ne fine 1.00, rs of 1836. cloth. toric. moral es for , 545 comns of voidf the Pure loth, f the pure ongphy, 35c, CUR. rmal RA. C. Svo. te 857. nce,

Ex-

sity

riam

RAL

475 Fergusons Lectures on MECHANICS, HYDROSTATICS, HYDRAULICS, PNEUMATICS, OPTICS, GEOGRAPHY, Astronomy and Dialling, edited and enlarged by SIR DAVID BREWSTER, 2 vols, 8vo, boards, accompanied by the 4to atlas of plates, 1.00, London, 1805.

20

Two MEN AND STUDENTS whose names are engraved in mperishable characters on the progressive history and iterature of the century.

- 476 Wood (Jas.) and Rev. S. Ince, F.R.S., OPTICS, ASTRONOMY, MECHANICS, etc., bound uniformly in 3 stout 8 vols, half russia, and bookplate in each volume of WILLIAM JOHN ALEXANDER, 1.25, Cambridge, 1801-5.
- 477 Gregory (Dr. Olinthus) TREATISE of MECHANICS, Theoretical, Practical and Descriptive, 2 vols, 8vo, also the volume of plates, together 3 vols, 8vo, half calf, uniform, 1.25, London, 1815.
- 478 Whewell's (Dr. W.) Mechanics, with numerous problems, 2 vols, 8vo, lost a cover, 30c. Cambs, 1819-23.
- **479 Bridge's** (B.) Treatise on Mechanics, intended as an introduction to the study of Natural Philosophy, 8vo, half calf, 35c, 1814.
- 480 Young (J. R.) Elements of Mechanics, Comprehending Statics and Dynamics, with copious problems and plates, 8vo, cloth, 35c, 1834.
- 481 Jackson (Prof. J. W.) ELEMENTARY TREATISE on MECHANICS. 4th edition. with folding plates, 8vo, cloth boards, 1.00, Schenectady, 1874.
- 482 Metropolitan (London) Sanitary Commission, FIRST Report of the Commissioners, etc, with Minutes of Evidence, 430 pp, and 2 plates, a scarce report, 8vo, cloth, 60c, 1848.
- 484 Phear's (J. B.) ELEMENTARY MECHANICS, large 8vo, cloth, 40c, Cambridge, 1850.
- 485 Cherriman (J. B.) and A. Baker, Elementary Treatise on Mechanics, including Statics, Dynamics of a Particle and a Collection of Problems in I Svo vol, cloth, 30c, Toronto, 1877.
- 486 Venteuroli (G.) Practical Mechanics, with a Treatise upon the principle of Virtual Velocities and its uses in Mechanics, translated by Dr. Creswell, 8vo, boards.
- 487 Grier's (W.) Mechanic's Pocket Dictionary of Technical Terms, Rules and Tables in Mathematics and Mechanics, sixth edition, 544 pp, thick 12mo, calf, 40c, Glasgow, 1840.
- 488 Parkison's (S.) Elementary Treatise on Mechanics, crown 8vo, cloth, 50c, Macmillan, 1855.
- 489 Jackson (Thos.) Lectures on Theoretical Mechanics, Statics, and Dynamics. Svo, half calf. 30c, 1827.

- 490 Wood's (J.) Principles of Mechanics, 8vo, half bound, 25c, Cambs, 1803.
- 491 Potter's (R.) A.M., Elementar Treatise on Mechanics, Svo, cloth, 35c, London, 1848.

492 **Snowball's** (J. C.) Elements of Mechanics, 8vo, cloth boards, 40c, 1845.

- 493 Proney (M. De) NOUVELLE ARCHITECTURE HYDRAULIQUE, Contenent l'art d'elever l'eau au moyen de differentes Machines, de construire dans ce fluide, de le diriger et generalament de l'appliquer, de diverses manieres aux besoins de la Societe, with about 50 folding plates, 2 stout vols, 410, boards, uncut, 1.00, Paris, 1796. An eminent French Mathematician and Engineer.
- 494 Tracts on Hydraulics, edited by THOS. TREDGOLD, with 7 plates, large 8vo, cloth

boards, 50c, 1826. Comprises SMRATOS'S Experimental Papers on the Power of Water and Wind to run Mills, etc.; VENTURE'S Experiments on the Motion of Fluids ; and DR. YOUNG'S Summary of Practical Hydraulics, etc., with notes by the editor.

- 495 Scott (M.) Civil Engineer, REPORT on the SUPPLY of WATER to the TOWN of SWANSEA, large folding plates, presentation copy from the author, imp Svo, cloth, 40c, 1852.
- 496 Miller's (W. H.) Elements of Hydrostatics and Hydrodynamics, 3rd edition, 8vo boards, 30c, Cambs, 1843.
- 497 Newth's (S.) Elements of Statics, Dynamics and Hydrostatics, with appendix on the Laws of Light, etc. crown 8vo, cloth boards, 40c, 1850.
- 498 **Cotes** (Roger) Hydrostatical and Pneumatical Lectures, with notes by DR. R. SMITH, 8vo, calf, 40c, 1775.
- 499 Lardner's (Dr.) Hydrostatics and Pneumatics, illustrations, 350 pp, post 8vo, cloth, 25c.
- 500 Vince (S.) Principles of Hydrostatics, 8vo, half calf, 30c, 1806.
- 501 Stevenson's (D.) Treatise on the application of Marine Surveying and Hydrometry to the practice of Civil Engineering, *tolding and other plates*, royal Svo, cloth, 75c, A. & C. Black, 1842.
- 502 Dallas (E. W.) Elements of Plane and Practical Geometry, with illustrative applications, 8vo, cloth, 40c, London, 1855.
- 503 Walker (Adam) well-known Inventor and Natural Philosopher, SYSTEM of FAMILIAR PHILOSOPHY in twelve lectures, including every material modern discovery and improvement to the present time, a suggestive and interesting work, with 47 folding and other copper plates on Mechanical subjects, thick 4to, calf, 75c, for the author, 1799.

THE

504 M Pri TH lar 182

505]

the

by 506 TO un 18

507 Pi ci L Sj

10

Is

p 1

8

t

8

7

51(

51

51

509

NEWTONIAN PHILOSOPHY, SCARCE OLD MATHEMATICS, ETC.

OLD MATHEMATICS, ETC.

- 504 New ono (Isaaco) Philosophiæ Naturales Principia Mathematica cum studio, P. P. THOMÆ LE SEUR et F. JACQUIER, 4 vols in 2, large 8vo, calf, a sound copy, 2.00, Glasguæ, 1822.
- 505 Newton's Principia, the first three, also the ninth and eleventh sections with appendix by J. H. Evans, 8vo, cloth, 35c, 1843.
- 506 Wright (J. M. F.) COMMENTARY on NEW-TON'S PRINCIPIA, with a supplementary volume, in 2 vols, large 8vo, cloth, 1.50, London, 1828.
- 507 Clarke (Dr. John) Demonstration of the Principal Sections of Sir Isaac Newton's Principles of Natural Philosophy, including the Laws of Motion, the chief Phoenomena of the System of the World, plates, Svo, calt, a cover loose, 40c, 1730.
- 508 Newton (T.) M.A., An Illustration of Sir Isaac Newton's Method of Reasoning, of prime and ultimate ratios, comprehending the 1st section of the Principia, 2 plates, 60 pp, 8vo, sewn, 35c, 1805.
- 509 Newton's (Sir Isaac) OPTICKS, or a Treatise on the Reflections, Refractions, Inflections and Colors of Light, folding plates, 8vo, calf, 75c, 1721.
- 510 -- Another Copy of the Early Second Edition, Svo, calf, 1.00, 1718.

0

I,

h,

0.

li-

to

nd

С.

nd

28-

nd

AR

to

ing

tes

for

- 511 Voltaire's Elements of SIR ISAAC NEW-TON'S PHILOSOPHY, translated and revised by John Hannah, Teacher of the Mathematics, 8vo, calf, 60c, at the Angel and Bible, 1738.
- 512 Martin (Benjamin) PHILOSOPHIA BRITAN-NICA, or a new and comprehensive system of the Newtonian Philosophy, Astronomy and Geography, containing the physical, mechanical, geometrical and experimental proofs and illustrations of the principal propositions of natural science, including the invention, structure, improvements and use of instruments, engines, machines, etc, with 80 plates and maps, 3 vols, 8vo, calf, 2.00, 1771.

Our author (B. MARTIN) was originally a plough-boy in Surrey, who, by his own industry, educated himself and became a famous Optician and Mathematical Writer.

- PHILOSOPHICAL GRAMMAR, a view 513 of the present state of Experimented Physiology or Natural Philosophy, with 20 curious old astronomical and geographical maps, etc, 8vo, calf, 75c, London, 1762.
- 514 . - YOUNG GENTLEMAN and LADY'S PHILOSOPHY in a survey of the whole works of nature and art, numerous interesting old copper plates, 2 vols, 8vo, calf, 75c, by the author at his house, 1659.
- 515 -Philological Library of Literary Arts and Sciences, 8vo, calf, 59c, at the Looking Glass, 1740.

A curious old work discussing every branch of Science from Theology to Heraldry.

- THE NEWTONIAN PHILOSOPHY, SCARCE 516 Gregory's (Dr.) Elements of Catoptrics and Dioptrics, translated from the Latin, with supplement by W. Brown, with an appendix on Reflecting Telescopes, and Original Letters between Sir Isaac Newton and Dr. Gregory, 8vo, calf, scarce, 75c, 1735.
 - 517 System of General Geography explaining the nature and properties of the earth, translated from the Latin of Bernhard Varenius and improved by Sir Isaac Newton, Dr. Jurin and Mr. Dugdale, numerous interesting and curious old maps and plates, 2 vols, 8vo, calf, 1,00, London, 1765.
 - 518 Brewster's (Sir D.) Life of Sir Isaac Newton, port, post 8vo, cloth, 35c, Murray, 1831.
 - 519 Gravesande (W. Jas.) MATHEMATICAL ELEMENTS 'of NATURAL PHILOSOPHY confirmed by experiments, or an introduction to SIR ISAAC NEWTON'S PHILOSOPHY, translated by DESAGELIERS, interesting and curious old plates, 2 vols, 8vo, 1.00, 1731.
 - 520 Metcalfe (S. L.) M.D., Caloric, its Mechanical, Chemical and Vital Agencies in the Phenomena of Nature, 2 vols, Svo, cloth, 1.00, W. Pickering, 1843.
 - 521 Bacon (Lord) Physical and Metaphysical Works, including his Dignity and Advance-ment of Learning, and his Novun Organum or precepts for the interpretation of nature, 65c, Bohn's Scientific Library.
 - 522 Powell (Baden) History of Natural Philosophy from the earliest times, post 8vo, cloth, 35c, Lard. Cap. Cy.
 - 524 Collins (M.) A Tract on the Possible and Impossible cases of quadratic duplicate equalities in the diophantine analysis, etc, including propositions in the theory of numbers, 60 pp, Svo, sewn, 40c, Dublin, 1848.
 - 525 Correlation and CONSERVATION of FORCES, a series of expositions by Prof. Grove, Prof. Helmoltz, Dr. Mayer, Dr. Faraday, Prot. Liebig, aud Dr. Carpenter, with an introduction and bibliographical notices of the chief promoters of the new views, post 8vo, cloth, 75c, 1870.
 - 526 Hickok (Dr. L. P.) RATIONAL COSMO-LOGY, or the Eternal Principles and the Necessary Laws of the Universe, 8vo, cloth, 65c, New York, 1858.
 - 527 Spencer's (Herbert) Classification of the Sciences, 8vo, cloth, has one title covered with MSS., 8vo, cloth, 40c, London, 1869.
 - 528 Donne (Benjamin) Teacher of the Mathematics, An Enlarged Syllabus of a Course of Lectures in Experimental Philosophy, a curious old work with MS. notes, etc, should be in a mathematical library, 60c, for the author, 1780.
 - 529 Knox (Alex.) Differential Calculus for Beginners, with examples, small 8vo, cloth, 35c, Macmillan, 1884.

NEWTONIAN PHILOSOPHY, SCARCE OLD MATHEMATICS, ETC. 2

- 532 O'Brien's (M.) Elementary Treatise on 548 Cambridge University Calendar, contains the Differential Calculus in which the method PROBLEMS in MATHEMATICS, and abounds with of limits is exclusively made use of, 8vo, cloth boards, 75c, Cambridge, 1842.
- 583 Haun (J.) Examples on the Integral Calculus, post 8vo, cloth, 20c, John Weale, 1850.
- 534 Smyth (W.) Elements of the Differential and Integral Calculus, 8vo, half calf, 50c, 1859.
- 535 Binns (W.) Treatise on Orthographic Projection, being a new method of teaching the 552 Solutions of the Senate House Problems Science of Mechanical and Engineering Drawing, 3rd edition, with numerous illustrations, 8vo, cloth, 50c, 1862.
- 536 Mathematics for PRACTICAL MEN, being 553 Bell (Andrew) Mathematical and Physical a COMMONPLACE BOOK of PURE and MIXED MATHEMATICS, designed chiefly for the use of Civil Engineers, Architects and Surveyors, by DR. OLINTHUS GREGORY, 4th edition, enlarged by Henry Law, C.E., and revised by J. R. Young, with folding plates, Svo, cloth, 1.00, London, 1862.
- 537 Goodwin (Harvey) ELEMENTARY COURSE of MATHEMATICS, designed principally for Students of the University of Cambridge, 5th edition, thick Svo, cloth, 60c, Cambs, 1857.

Comprising Algebra, Plane Trigonometry, Conic Sections, Mechanics, Dynamics, Statics, Newton, Hydrostatics, Optics and Astronomy.

- 538 Hutton (Chas.) LL.D., COURSE of MATHE-MATICS, 3 vols, 8vo, half calf, 1.00, London, 1819.
- 539 Dupin (Baron) and G. Birkbeck, MATHEMA-TICS PRACTICALLY APPLIED to the USEFUL and FINE ARTS, etc, 8vo, cloth, 50c, 1854.
- 540 Horsley (Bishop) Elementary Treatises on the Fundamental Principles of Practical Mathematics, 8vo, half calf, 40c, Clarendon Press, 1801.
- 541 Dalby (Isaac) A COURSE of MATHEMA-TICS, designed for the use of the officers and cadets of the Royal Colitary College, 2 vols, large Svo, half calf, 1.00, London, 1807.
- 542 Cross (E. J.) Elementary Treatise on Kinematics and Kinetics, crown 8vo, cloth, 50c, Rivington's, 1876.
- 543 Wormell (R.) The Principles of Dynamics, an Elementary Text-Book for Science Students, crown 8vo, cloth, 75c, Rivington's, 1876.
- 544 Earnshaw (S.) DYNAMICS, or a Treatise on Motion, and on Attractions, 8vo, half calf, 50c, Cambridge, 1844.
- 545 Statuta Academiæ Cantabrigiensis, 156 pp, 1870; ORDINATIONES Academiæ Cantabrigiensis, 322 pp, 1871, in one nice Svo vol, half calf, neat, 75c.
- 546 Statutes (The) of Trinity College, Cambridge, 8vo, cloth, 25c, University Press, 1861.
- 547 Cambridge Classical Examinations, second series, 8vo, cloth, 50c, Cambs, 1831.

interesting information to old Cambridge men, for 1823, 346 pp, boards, scarce, 50c.

- Also for 1825, 50c. 549 -

550 -- Also for 1826, 50c

- 551 Mathematical Problems and Examples arranged according to subjects from the Senate House Examination Papers, 1821-1836, etc, 8vo, cloth boards, 60c, Cambs, 1837.
- and Riders for 1854, by the Moderators and Examiners, with the examination papers in full, 8vo, cloth, 60c, Cambs, 1854.
- Tracts, 8vo, cloth boards, 25c, 1834.
- 554 University of London, Minutes of the Senate and all Committees, down to July 22nd, 1840, a thick crown 8vo vol, 1.25.

An autograph letter accompanying this work, runs as follows :-- "My dear Lord, I send you a copy of our Minutes, and underneath I have noted the page where your Lordship will see the different plans that were proposed for the Constitution of the University. I am. my dear Lord, yours very faith-fully, J. W. LUBBOCK."

- 555 Chauvenet (W.) Treatise on the Method of Least Squares, or the Application of the Theory of Probabilities in the Combination of Observations, 8vo, cloth, 60c, 1868.
- 556 Papers for the Schoolmaster, 256 pp, post 8vo, cloth, 35c, 1851.
- 557 Miller (W. J.) Mathematical Questions with their Solutions, from the Educational Times, 82 pp, large Svo, sewn, 35c, London, 1864.
- 558 Griffin (W. E.) Solutions on the Examples appended to a Treatise on the Motion of a Rigid Body, 8vo, cloth, 50c, Cambridge, 1848.
- 559 Hutt (W. Wayman) Solutions, Goodwin's pollection of problems and examples, third edition, by T. G. VYVYAN, 8vo, cloth, Cambridge, 1.00, 1863.
- 560 White (J. S.) Recent Examination Papers for admission to Harvard, Yale, Princeton, Sheffield Scientific School and Columbia School of Mines, post 8vo, cloth, 50c, 1888.
- 561 Parker (T. A.) The Quadrature of the Circle, containing demonstrations of the errors of geometry in finding the approximation in use, etc, etc, 8vo, cloth, 75c, 1851.
- 562 Somerset (Duke of) A Treatise in which the Elementary Properties of the Ellipse as deduced from the Properties of the Circle are Geometrically Demonstrated, 8vo, cloth, 75c, London, 1842.
- 563 Harris (John) Kuklos, The CIRCLE and the STRAIGHT LINE, 3 vols, ALSO the PLATES to ACCOMPANY EACH vol, large 8vo, cloth, 1.00, Montreal, 1874.

564 Lloyd (Rev. Humphrey) Treatises on Light | 578 Simpson (Thos.) F.R.S.. The NATURE and Vision, 400 pp. 8vo. cloth, scarce, 75c. London, 1831.

Tright

ONES.

840

thè

, 4th

rches

cloth.

ard.

oads.

Dia

Im-

for

RTH

00

rks.

1.00.

ons,

leu

and

8v0,

the

on

75c.

the

for

V0.

and

the

ous

ms,

an. in

ion

De.

LIS

on

cD, er-

гн

0. 00.

of

aet,

- 565 Webster's (T.) The Theory of the Equilibruim of the Fluids, 8vo, cloth boards, 50c. Cambridge, 1836.
- 566 Higgins (W. M.) Introductory Treatise on the Nature and Properties of Light and on Optical Instruments, 8vo, boards, scarce, 1.00, London, 1829.
- M. FARADAY, Esq., F.R.S., WITH the AUTHOR'S RESPECTS-MSS. on the fly-leaf.
- 567 Taylor's (Brook) New Principles of Linear Perspective, or the Art of Designing. 70 pp and 13 plates, 8vo, sewn, 30c, 1719.
- 568 Thenot (T. P.) Practical Perspective for the use of students, with about CO plates, 8vo, cloth, 60c, 1838.
- 569 Gibbons (D.) A Treatise on the Law of Dilapidations and Nuisances, Svo, cloth boards. 50c. Weale's Architectural Library. 1838.
- 570 Scientific Irrigator (The) Chapters on the Physical Sciences, intended for ladies, 480 pp, post 3vo, boards, 40c, Edinburgh, 1828.
- 571 Martine (Dr. G.) Essays and Observations on the Construction and Graduation of Thermometers, the Heating and Cooling of Bodies, etc, 12mo, calf, 40c, 1780.
- 572 Reid (Lieut.-Col. W.) An Attempt to Develop the LAW of STORMS BY MEANS af FACTS arranged according to place and time, and hence to point out a cause for variable winds. with a view of practical use in navigation, with large folding charts and woodcuts, imp 8vo, cloth, 60c, London, 1838.
- 573 Higgins (Dr.) Experiments and Observations respecting Cements and Preparing Quick Lime, etc, 233 pp, 8vo, sewn, 40c, London,
- 574 Jones (Capt.) Artificial Fire Works Improved with Modern Practice, new edition, including Belidor's New Method of Mining, etc, with plates, 8vo, calf, 40c, 1776.
- 575 Chas (Capt.) Course of Gynmastic Exercises, intended to improve and develope the physicial powers of man, with 70 engravings, etc, 8vo, boards, 50c, London, 1825.
- 576 Battle Fought with the BOASTERS, or Patroclus's Weak Defence by Force Defeated, etc, and all their Vaunting Host Cast Headlong into the Sea of Ignorance, by Philomathematicus's Army of Arguments, a scarce old mixture of mathematics and poetry, etc, 36 pp, 8vo, 60c, in the year 1738.
- 577 Parker's (B.) A Second Volume of Philosophical Meditations, with Divine Inferences, includes the Nature of Lightning in a Clear Sky, Fire Balls, Fire Drakes, Shooting Stars, etc, 8vo, calf, 50c, 1755.

- and LAWS of CHANCE, 95 pp, 8vo, sewn and uncut, A RARE OLD WORK, 75c, London, 1792.
- 579 Musschenbrock (Petrus Van) TENTA-MINA EXPERIMENTORUM NATURALIUM, numerous folding plates, illustrating Experimental Philosophy, etc, 4to, vellum, 1.25, Lug Bat, 1731.

A celebrated old Dutch Physician who made many Discoveries, especially in Magnetism and the Cohesion of Bodies. He was an intimate friend of NEWTON, and was a member of the Royal Society.

- 580 Davy (Chas.) LETTERS UPON the SUBJECTS of LITERATURE, including a Translation of Euclid's Section of the Cannon, and his Treatise on Harmonie, with an explanation of the Greek Musical Modes, according to the Doctrine of Ptolemy, 2 vols, 8vo, calf, 75c, 1787.
- 581 Grund's (F. J.) M. Hirsch, Collection of Arithmetical and Algebraical Problems and Formulæ, small 8vo, boards, 50c, Boston, 1831.
- 582 Hildrop (John) Free Thoughts upon the Brute Creation, or an Examination of Father Bougeant's Philosophical Amusements, etc, 8vo, calf. 40c. London, 1743.
- 583 Elements of Conic Sections, with the sections of the Conoids, 8vo, half calf, 25c, Cambs, 1826.
- 584 Newton (T.) Treatise on Conic Sections, plates, 8vo, boards, 35c, 1794.
- 585 Hamilton (H. P.) F.R.S., An Analytical System of Conic Sections, 8vo, cloth boards, 40c, Cambs, 1833.
- Another copy, 8vo, boards, presen-586 tation copy to the REV. DR. CRESWELL, with the AUTHOR'S RESPECTS, 50c, Cambs, 1830.
- 588 Bridge (B.) Treatise on the Construction, Properties and Analogies of the Conic Sections. 8vo, half calf, 35c, 1831.
- 589 Bridge (B.) Treatise on the Three Conic Sections adapted to the study of Sir Isaac Newton's Principia, etc, Svo, half calf, 40c, London, 1811.
- 590 Hutton's (C.) Elements of Conic Sections, including exercises in mathematical philosophy. 8vo, half calf, 40c, 1787.
- 591 Robertson (A.) Sectionum Conicarum, Accedit tractatus de Sectionibus Conicis ed de Scriptoribus qui earum doctrinam tradiderunt, numerous folding plates, thick 4to, boards, 60c, Oxonii, 1792.
- 592 Simpson (R.) Elements of Conic Sections with plates, 8vo, calf, 35c, Edinburgh, 1792.
- 593 Bridge (B.) Treatise on Conic Sections, 8vo, boards, 25c, 1811.
- 594 Lyons (Israel) Treatise on FLUXIONS, plates, 8vo, calf, 40c, 1858.
- 595 Vince (S.) F.R.S., Principles of FLUXIONS, 8vo, cloth, 30c, 1812.

24 NEWTONIAN PHILOSOPHY, SCARCE OLD MATHEMATICS, ETC.

- 596 Maclaurin (Colin) one of the most dis- 610 Philosophical Transactions and Collectinguished scientific characters of the age, TREAT-ISE ON FLUXIONS, numerous folding plates, 2 thick 4 to vols, sewn and uncut, scarce, 1.00, Edinburgh, 1742.
- 597 Phelps (R.) Elementary Treatise on Optics, the constructing of telescopes, etc. 8vo, boards, 35c, Cambs, 1835.
- 598 Smith's (R.) LL.D., COMPLETE SYSTEM of OPTICS, a popular, a mathematical, a mechanical and a philsophical treatise, 2 vols, 4to, calf, gilt.edges, covers loose, has been a very handsome book, 1.50, Cambridge, 1738.
- 599 Si.npson's (Thos.) F.R.S., MATHEMATIC-AL WORKS, 6 vols, 8vo, calf gilt, 2.25, 1768-1775.

A scarce set and seldom met with. Comprising geometry and trigonometry, algebra, fluxions, exercises and annuities and reversions.

- 600 Jackson's (J.) Rational Amusements, a collection of about 200 curious puzzles and paradoxes, with solutions, post Svo, boards, 20c, 1821.
- 601 Hannay and Dictrichsens Almanack and Astronomical Ephemeris for the years, 1839-40-41-42, bound in 1 8vo vol, cloth, 60c.
- 602 Farmer's Almanac and Calendar for 1841-2-3 and 1844, the first four years, about 100 pages each, in 1 thick post 8vo vol, cloth, interesting and scarce, 60c, London, J. Ridgewav.
- 603 Hutton's Compendious Measurer, being a Treatise on Mensuration and Practical Geometry, post 8vo, cloth, 30c.
- 604 Hutton's (C.) DARIAN MISCELLANY, consisting of all the useful and entertaining parts, mathematical and poetical from the LADIES DIARY, front, 2 vols, post 8vo, half calf, scarce, 1.00, London, 1775.
- .605 Wallis (John) Due Correction for Mr. Hobbes, or School Discipline, for not saying his lessons right in auswer to his six lessons, directed to the professors of mathematics, 112 pp, 12mo, sewn, scarce, 75c, Oxford, 1656.
- 606 Keill (J.) Philosophical Lectures read in the University of Oxford, including the Theorems of M. HAYGENS, 8vo, calf, 50c, at the Oxford Arms, 1720.
- 607 Wards (John) YOUNG MATHEMATICIAN'S GUIDE, being a plain and easy introduction to the mathematics, 480 pp, 8vo, calf, 1.00, London, 1740.
- 608 Smith (Dr. R,) HARMONICS, or the Philosophy of Musical Sounds, 280 pp, and 20 folding plates, 8vo, calf, scarce, 75c, London, 1759.
- 609 Hanksbee (F.) F.R.S., Physico-Mechanical Experiments on various subjects, containing an account of several surprising Phœnomena touching Light and Electricity, etc, with plates, a scarce old volume, 8vo, calf, 1.25, at the Ships, 1719.

tions, abridged and disposed under general heads, vols 1 and 2, thick 4to, calf, 1.75, 1705-16.

An interesting combination of Mathematics and Physi-ology, Philosophy and Natural History, with numerous plates. Amongst the contributors we notice most of the great men of the time. On the reverse of the first title will be found the Ancient Bookplate of Sir John Houstown, of that elk

- 611 Petty (Sir W.) DISCOURSE made before the ROYAL SOCIETY, Nov., 1674, concerning the use of duplicate proportion, in sundry important particulars, together with a new hypothesis of springing on elastique motions, a scarce little 12mo of 134 pp, a cover loose, 75c. at the Bell, 1674.
- 612 Cheyne (G.) F.R.S., Philosophical Principles of Religion, including the nature and kinds of Infinites, their arithmetic and use, etc, 8vo, calf, 40c, at the Golden Ball.
- 613 Baker (Henry) of Microscopes and the Discoveries made thereby, illustrated with many copper-plates, 2 vols, 8vo, calf scarce, 1.75, London, J. Dodsley, 1785.
- 614 Musschenbroek (Dr. Peter Van) Elements of Natural Philosophy, translated by Colson, numerous curious old plates, 2 vols, 8vo, cloth, 75c, at the Lamb, 1744.
- 615 Nollet (Abbe) Lectures in Experimental Philosophy, translated by John Colson, F.R. S., 8vo, calf, 50c, 1648.
- 616 Ray (John) Physico-Theological Discourse concerning the primitive Chaos, etc, the nature of earthquakes and an historical account of those two late remarkable ones in Jamaica and England, port, 8vo, calf, 60c, 1721.

Eminent man of science whose name is commemorated by the well-known Ray Society.

- 618 Keill's (J.) Examination of BURTON's Theory of the Earth, with Remarks on WHISTON and a Dissertation on the Different Figures of the Celestial Bodies, etc, plates, 8vo, calf, 50c, London, 1733.
- 619 School Messenger (The) A Journal Devoted to Elementary Mathematics, Queries and Answers on Grammar, History, Philosophy, etc, vols 1 to 4 complete in parts, 1.00, And Louisiana, 1844-47.
- (The) MATHEMATICAL 620 Davenport MONTHLY, front, 2 vols, also 2 parts of vol 3, all published, sewn logether, imperial 4to, 75c, July, 1887, to September, 1889.
- 621 Mathematical Magazine, a Journal of Elementary and Higher Mathematics, vol 1, also No. 1 to 7 of vol 2, 4to, 1.25 the lot, Washington, 1882.
- 623 Whittenberger (The) A Journal of Li. erature, Philosophy and Mathematics, Nos, 40 to 67, imp 8vo, 1.25, Springfield, Ohio, 1877-1880.

grea GAL spl

TH

7

FRE

BOO OF

N.

61

WC

T

С

No.