A Supplement to A Classified Bibliography on the History of Scientific Instruments by A.V. Simcock

This list contains references to 255 articles and 76 books and pamphlets supplementary to the version of Gerard Turner's thirteen SIC annual bibliographies recently collected into book form under David Bryden's editorship (G. L'E. Turner & D. J. Bryden, A Classified Bibliography on the History of Scientific Instruments, Oxford: Scientific Instrument Commission, 1997). These additional references cover items published in the same period, 1980-1995 inclusive, but are mostly from the years 1990-95. They are presented under the classifications devised by David Bryden, slightly simplified on account of the smaller size of the present list; where appropriate, entries are repeated under more than one heading. As with Gerard Turner's original lists, the main source has been materials and information readily to hand, rather than systematic trawling of listings and databases. The compilation of this supplement is not meant to imply criticism of the Turner/Bryden bibliography, and has been undertaken in the same spirit the wish to bring information which happens to be accessible to some of us to the attention of the wider community of those interested in the history of scientific instruments.

**ASTROLABES**

Ali AMAHAN, "L'astrolabe ", in De l'Empire romain aux Villes impériales: 6000 ans d'art au Maroc (Paris: Musée du Petit Palais, 1990), pp.69-72 Section of exhibition catalogue


Sreeramula Rajeswara SARMA, "The Lahore Family of Astrolabists and their Ouvrage ", Studies in History of Medicine and Science (Hamdard University, New Delhi), new series vol.13 no.2, 1994, pp.205-224 A dynasty of Muslim instrument makers in India, 16th-17th centuries


ASTRONOMICAL MODELS

Robert BALDWIN, "P. Giovanni Maria Cassini, C.R.S. (1745-1824 ca.) and his Globes ", Der Globusfreund, no.43/44, December 1995, pp.201-218

Lajos BARTHA, "Egy renesz nsz égg "mb, mint csillag szati műszer (a Dorn-Bylica glóbusz, 1480-ból) ", Technikat "rténeti Szemle (Budapest), vol.18, 1990-91, pp.87-96


Jürgen BLUNCK (assisted by Lothar ZÖGNER), Der Rote Planet im Karten Bild: 200 Jahre Marskartographie von Herschel, Beer und Madler bis zur CD (Gotha: Justus Perthes Verlag, 1993) 132pp. Exhibition catalogue from the Berlin Staatsbibliothek, containing globes as well as maps of Mars

Wolfram DOLZ, "Metallgloben - Kompilation oder Kopie ", Der Globusfreund, no.43/44, December 1995, pp.107-120 In German and English

António ESTACIO DOS REIS, "The Oldest Existing Globe in Portugal ", Der Globusfreund, no.38/39, November 1990, pp.57-65 In English and German

Hirotada KAWAMURA, Kazutaka UNNO, & Kazuhiko MIYAJIMA, "List of Old Globes in Japan ", Der Globusfreund, no.38/39, November 1990, pp.173-177


Werner KUMMER, "Der 106 cm Erdglobus von Adolf Henze (Leipzig 1891) ", Der Globusfreund, no.38/39, November 1990, pp.105-112 In German and English


Paul KUNITZSCH, "European Celestial Globes with Arabic Inscriptions ", Der Globusfreund, no.43/44, December 1995, pp.135-150 In English and German


Günther OESTMANN (& Thomas GRUNERT), "Johannes Stoeffler's Celestial Globe ", Der Globusfreund, no.43/44, December 1995, pp.59-76 and plates 5-8 and front cover In English and German


Paul PETERS, "The Restauration of Two Mercator-Globes Terrestrial and Celestial ", Der Globusfreund, no.43/44, December 1995, pp.265-281 In English and German
Michael Hojlund RASMUSSEN, "The Restoration of a Johann Beyer Terrestrial Globe of 1722 ", Der Globusfreund, no.38/39, November 1990, pp.131-139 In English and German

Emilie SAVAGE-SMITH, "The Classification of Islamic Celestial Globes in the Light of Recent Evidence ", Der Globusfreund, no.38/39, November 1990, pp.23-35 In English and German

Rudolf SCHMIDT, "Zur Arbeitsweise Vincenzo Coronellis ", Der Globusfreund, no.43/44, December 1995, pp.151-170 In German and English

Sylvia SUMIRA, "The Conservation of a Celestial Globe by Hondius of 1613 ", Der Globusfreund, no.43/44, December 1995, pp.283-294 In English and German

S. SUTERA, "Freschi di restauro: Due globi di Vincenzo Coronelli ", Museoscienza (Milan), October 1991, pp.14-17


ASTRONOMY & ASTRONOMICAL INSTRUMENTS see also: astronomical models; telescopes


Jonathan BETTS, "The Eighteenth Century Transits of Venus, the Voyages of Captain James Cook and the Early Development of the Marine Chronometer ", Antiquarian Horology, vol.21 no.1, Autumn 1993, pp.60-69

Jürgen BLUNCK (assisted by Lothar ZÖGNER), Der Rote Planet im Karten Bild: 200 Jahre Marskartographie von Herschel, Beer und Madler bis zur CD (Gotha: Justus Perthes Verlag, 1993) 132pp. Exhibition catalogue from the Berlin Staatsbibliothek, containing globes as well as maps of Mars


David H. DeVORKIN, "Defending a Dream: Charles Greeley Abbot's Years at the Smithsonian", Journal for the History of Astronomy, vol.21 part 1 no.63, February 1990, pp.121-136 Abbot (1872-1973), head of the Smithsonian Astrophysical Observatory, was an astronomer with a talent for instrumentation, especially designing pyrheliometers for his solar observations


David LEVERINGTON, A History of Astronomy from 1890 to the Present (London & Berlin: Springer-Verlag, 1995) 387pp. Includes sections on instruments and observatories


Yukio OHASHI, "A History of Astronomical Instruments in India", Studies in History of


Carlene E. STEPHENS, "Astronomy as Public Utility: The Bond Years at the Harvard College Observatory ", Journal for the History of Astronomy, vol.21 part 1 no.63, February 1990, pp.21-35 William C. Bond (1789-1859) and his son George, clock and instrument makers in Boston and astronomers to Harvard College

Claus THYKIER (ed.), Dansk Astronomi Gennem Firehundrede År, 3 volumes (Copenhagen: Rhodos, 1990) 621pp. Instruments and observatories in vol.2


Gudrun WOLFSCHMIDT, Milchstraáe Nebel Galaxien: Strukturen im Kosmos von Herschel bis Hubble (Munich: Deutsches Museum, 1995) 186pp. The study of galaxies by the methods of astrophysics, especially spectroscopy


BIBLIOGRAPHY

Peter M. HOPP, A Slide Rule Bibliography, supplement to Journal of the Oughtred Society, numbered vol.3 no.2b, September 1994 (Palo Alto & Oakland, California: The Oughtred Society, 1994)


BIOGRAPHICAL STUDIES - INSTRUMENT MAKERS & FIRMS


Silvio A. BEDINI, "William Hamlin and his Telescopes ", Rittenhouse, vol.4 no.3, May 1990, pp.87-95 Engraver and instrument maker of Providence, Rhode Island (1772-1869)

Stephen BIRD, Michael LOWCOCK, Jo OWEN, & John TURNER, A Bird Family Saga: An Outline of the Life and Works of John Bird (1709-1776) and of Later Members of the Bird Family (no place: [privately issued by the authors], 1995) 52pp.


Hans DENNERT, "Dennert & Pape and Keuffel & Esser ", Journal of the Oughtred Society, vol.3 no.1, March 1994, pp.3-6 Notes on the leading German slide rule maker, and comparisons
to the early products of America's leading maker


Wilfried FELDENKIRCHEN, Siemens 1918-1945 (Munich & Zurich: Piper, 1995) 77pp. Including material on the company's history before 1918


David FOWLER, "Parsons: A Legend in his Own Lifetime ", The Engineer, vol.279, October 27, 1994, pp.15-16 Engineer and telescope manufacturer Sir Charles A. Parsons (1854-1931)


Andrew KING, "John Harrison Copley Medallist ", Antiquarian Horology, vol.21 no.1, Autumn 1993, pp.52-59


Sreeramula Rajeswara SARMA, "The Lahore Family of Astrolabists and their Ouvrage ", 
Studies in History of Medicine and Science (Hamdard University, New Delhi), new series vol.13 no.2, 1994, pp.205-224 A dynasty of Muslim instrument makers in India, 16th-17th centuries


Rodger SHEPHERD, "The End of the ARISTO Slide Rules: A Case Study ", Journal of the Oughtred Society, vol.2 no.2, October 1993, pp.5-7 Sudden collapse of the slide rule market in the 1970s, and its effect on Dennert & Pape (ceased trading 1979)


William H. SKERRITT, "The Hanks Family of Instrument Makers ", Rittenhouse, vol.4 no.4, August 1990, pp.102-113 Forerunners of the famous American firm of Gurley; originally, at the beginning of the 19th century, clockmakers and bellfounders

Carlene E. STEPHENS, "Astronomy as Public Utility: The Bond Years at the Harvard College Observatory ", Journal for the History of Astronomy, vol.21 part 1 no.63, February 1990, pp.21-35 William C. Bond (1789-1859) and his son George, clock and instrument makers in Boston and astronomers to Harvard College

Piero TODESCO, "La Famiglia Lusverg dal '600 all '800 ", Memorie della Societa' Astronomica Italiana, vol.66 no.4, 1995, pp.895-901

Donald & Anne WING, "The Pool Family of Easton, Massachusetts ", Rittenhouse, vol.4 no.4, August 1990, pp.118-126 Instrument makers from c.1825

Huib J. ZUIDERVAART, Speculatie, wetenschap en vernuft: Fysica en astronomie volgens Wytze Foppes Dongjuma (1707-1778), instrument-maker te Leeuwarden (Leeuwarden, The Netherlands: Fryske Akademy, 1995) 206pp. A Frisian carpenter who moved to town and became an instrument maker and surveyor, as well as being an astronomer and natural philosopher

BIOGRAPHICAL STUDIES - OTHER

Albert ABRAMSON, Zworykin, Pioneer of Television (Champaign, USA: University of Illinois Press, 1995) 319pp. Vladimir K. Zworykin (1889-1982), the Russian/American electronics pioneer, who contributed to the early development of electron microscopes, photoelectric cells, facsimile machines, etc., as well as of television cameras and receivers

Donald ADAMSON, Blaise Pascal: Mathematician, Physicist, and Thinker about God (New


David H. DeVORKIN, "Defending a Dream: Charles Greeley Abbot's Years at the Smithsonian ", Journal for the History of Astronomy, vol.21 part 1 no.63, February 1990, pp.121-136 Abbot (1872-1973), head of the Smithsonian Astrophysical Observatory, was an astronomer with a talent for instrumentation, especially designing pyrheliometers for his solar observations


**CALCULATING & COMPUTING DEVICES - MECHANICAL & ELECTRONIC**


Jacques ARSAC, "De l'intelligence humaine à celle de la machine", Techniques & culture, nos.23-24, January-December 1994, pp.221-234


Friedrich Wilhelm KISTERMANN, "Die Rechentechnik um 1600 und Wilhelm Schickards Rechenmaschine ", in Friedrich Seck (ed.), Zum 400. Geburtstag von Wilhelm Schickard ... (Contubernium ..., vol.41) (Sigmaringen: Jan Thorbecke Verlag, 1995), pp.241-272


Guy MOURLEVAT, Les machines arithmétiques de Blaise Pascal (Clermont-Ferrand: Académie des Sciences, Belles-Lettres et Arts, 1988), 76pp.+52 plates


Andrew WARWICK, "The Laboratory of Theory or What's Exact about the Exact Sciences? ", in M. Norton Wise (ed.), The Values of Precision (Princeton, New Jersey: Princeton University Press, 1995), pp.311-351 Introduction of the use of mechanical calculators in the late 19th century


**CALCULATING & COMPUTING DEVICES - SLIDE & OTHER RULES**


Bruce BABCOCK, "A Guided Tour of an 18th Century Carpenter's Rule ", Journal of the


Hans DENNERT, "Dennert & Pape and Keuffel & Esser ", Journal of the Oughtred Society, vol.3 no.1, March 1994, pp.3-6 Notes on the leading German slide rule maker, and comparisons to the early products of America's leading maker


Peter M. HOPP, A Slide Rule Bibliography, supplement to Journal of the Oughtred Society, numbered vol.3 no.2b, September 1994 (Palo Alto & Oakland, California: The Oughtred Society, 1994)


Richard KNIGHT, "A Carpenter's Rule from the Mary Rose ", Tools & Trades (Tool and Trades History Society), vol.6, August 1990, pp.43-55


Mark REES, "Not So Much a Rule - More a Vade Mecum ", TATHS Newsletter (Tool and Trades History Society), no.45, Spring 1994, pp.35-38


Rodger SHEPHERD, "The End of the ARISTO Slide Rules: A Case Study ", Journal of the Oughtred Society, vol.2 no.2, October 1993, pp.5-7 Sudden collapse of the slide rule market in the 1970s, and its effect on Dennert & Pape (ceased trading 1979)

Rodger SHEPHERD, "Pickett Metal Slide Rules ", Journal of the Oughtred Society, vol.1 no.1,
February 1992, pp.5-8


CHEMISTRY & CHEMICAL INSTRUMENTS


Ole BOSTRUP, "Kemi på Rosenholm, - for over 300 år siden ", Dansk Kemi, vol.4, 1987, pp.120-123 17th-century chemical glassware excavated from the moat of a Danish country house


COLLECTIONS & MUSEUMS - GENERAL


COLLECTIONS & MUSEUMS - SPECIFIC see also: exhibition catalogues

CHINA SCIENCE AND TECHNOLOGY MUSEUM, China Ancient Traditional Technology Exhibition (Beijing: China Science and Technology Museum, no date [c.1988]) 16pp.

CHINA SCIENCE AND TECHNOLOGY MUSEUM, China Science and Technology Museum (Beijing: China Science and Technology Museum, no date [c.1988]) 16pp. General pictorial
Marie-Véronique CLIN, "Le Musée d'histoire de la médecine ", La Revue (Musée des Arts et Métiers, Paris), no.13, December 1995, pp.36-40

COMMUNICATIONS & ELECTRONICS MUSEUM TRUST, The Guiding Hand: A Brief History of Allied Radar in World War II (Bristol: Communications & Electronics Museum Trust, 1994) 26pp. Catalogue of exhibits at the museum (which is at Bletchley Park, near Milton Keynes), including early television receivers, aircraft compasses, military wireless sets, as well as radar equipment


Peter FRIESS & Peter M. STEINER (eds.), Deutsches Museum Bonn: Forschung und Technik in Deutschland nach 1945 (Munich: Deutscher Kunstverlag, 1995) 576pp. Recently-opened museum concentrating on science and technology in Germany since 1945


[GHENT UNIVERSITY MUSEUMS], Tussen kunst en kennis: Een keuze uit de Gentse universitaire verzamelingen (Ghent: Rijks Universiteit Gent, 1992) 127pp. Catalogue of a series of four exhibitions marking the 175th anniversary of the university, and drawn from all the university museums


Johan KNUTSSON, "A Seventeenth Century Collection of Rose Engines and Tools: Notes on the Turning Room at Skokloster, Sweden ", Tools & Trades (Tool and Trades History Society), vol.6, August 1990, pp.10-22 About 2,000 tools for woodworking and clockmaking, from large lathes to small hand tools, mostly 17th-century

[Pierre MARLY], "Les Trésors du Roi des Opticiens ", Regards (house magazine of Essilor), no.39, Spring 1993, pp.16-17 Collection of Pierre Marly, Paris

Arnold MYERS (ed.), Historic Musical Instruments in the Edinburgh University Collection,
vol.2 part K, 'Ancillary Equipment' (Edinburgh: Edinburgh University Collection of Historic Musical Instruments, 1995) 66pp. Apparatus relating to acoustics and musical physics, by makers such as Koenig


Stefano SOFI, "Un gioco da ragazzi saccheggiare il museo ", Il Messaggero, May 22, 1984, p.7 Theft of instruments from the museum of the Osservatorio di Monte Mario, Rome

TARTU UNIVERSITY, Museum historicum universitatis tartuensis (Tartu: Tartu Ülikooli Ajaloo Muuseum [Museum of the History of Tartu University], 1994) 40pp. Includes scientific instruments


CONSTRUCTION TRADES - INSTRUMENTS

Bruce BABCOCK, "A Guided Tour of an 18th Century Carpenter's Rule ", Journal of the Oughtred Society, vol.3 no.1, March 1994, pp.26-34 A Coggeshall type folding rule, one arm of which is a slide rule

Richard KNIGHT, "A Carpenter's Rule from the Mary Rose ", Tools & Trades (Tool and Trades History Society), vol.6, August 1990, pp.43-55


DRAWING & COPYING INSTRUMENTS (including office equipment)


Julien FEYDY, "Le pantélographe de Caselli: "Comme chacun sait ... " ", La Revue (Musée des Arts et Métiers, Paris), no.11, June 1995, pp.50-57 An early process of telegraph facsimile transmission developed around 1860, and its apparatus


ELECTRICAL & MAGNETIC INSTRUMENTS see also: telegraphy & wireless


Sigfrido LESCHIUTTA, "I primi strumenti elettrici ", Giornale di fisica, vol.34 no.4, 1993, pp.279-309


EXHIBITION CATALOGUES (temporary exhibitions only)

Jürgen BLUNCK (assisted by Lothar ZÖGNER), Der Rote Planet im Karten Bild: 200 Jahre Marskartographie von Herschel, Beer und Madler bis zur CD (Gotha: Justus Perthes Verlag, 1993) 132pp. Exhibition catalogue from the Berlin Staatsbibliothek, containing globes as well as
maps of Mars


Ivan D'HONDT (& Robert VRIELENCK), "From the Camera Obscura to the Cinema: Introduction to the Exhibition ", Plateau, vol.15 no.1, 1994, complete issue In four languages

[GHENT UNIVERSITY MUSEUMS], Tussen kunst en kennis: Een keuze uit de Gentse universitaire verzamelingen (Ghent: Rijks Universiteit Gent, 1992) 127pp. Catalogue of a series of four exhibitions marking the 175th anniversary of the university, and drawn from all the university museums


GNOMONICS


Margarida ARCHINARD, "La "Navicula de Venetiis " du Musée d'Histoire des Sciences de Genève ", Musées de Genève, no.334, April 1995, pp.2-8 and front cover


John MOORE, "The Ivory Diptych Dial - Part 1 ", Bulletin of the British Sundial Society,


John MOORE, "Portable Dials - Art and Decoration ", Bulletin of the British Sundial Society, no.95.2, June 1995, pp.4-8


Hugo PHILIPP, Daniel ROTH, & Willy BACHMANN, Sonnenuhren: Deutschland und Schweiz (Stuttgart: Deutsche Gesellschaft für Chronometrie, 1994) 851pp. Catalogue of sundials in Germany and Switzerland


René R-J. ROHR, "The Sundial of the Old Franciscan Church in Rouffach ", Bulletin of the British Sundial Society, no.93.3, October 1993, pp.2-5


HOROLOGY (including calendars) see also: astronomy & astronomical instruments; gnomonics


François BELLEC, "L'irritant problème de la longitude ", La Revue (Musée des Arts et Métiers, Paris), no.13, December 1995, pp.17-22 Illustrates several instruments, including Berthoud's chronometers of the 1760s


Jonathan BETTS, "The Eighteenth Century Transits of Venus, the Voyages of Captain James Cook and the Early Development of the Marine Chronometer ", Antiquarian Horology, vol.21 no.1, Autumn 1993, pp.60-69


Giuseppe BRUSA, "Early Mechanical Horology in Italy ", Antiquarian Horology, vol.18 no.5, Spring 1990, pp.485-513


and front cover A clock by the famous horological tool maker (1720-1787)

Andrew KING, "John Harrison Copley Medallist ", Antiquarian Horology, vol.21 no.1, Autumn 1993, pp.52-59


S. R. SARMA, "The Bowl that Sinks and Tells Time ", The India Magazine of her People and Culture, September 1994, pp.30-36


MATHEMATICS & ITS APPLICATIONS (including measurement) see also: calculating & computing devices; metrology

Bruce BABCOCK, "A Guided Tour of an 18th Century Carpenter's Rule ", Journal of the Oughtred Society, vol.3 no.1, March 1994, pp.26-34 A Coggeshall type folding rule, one arm of which is a slide rule


Albrecht DÜRER, Géometrie, translation, introduction, and commentary by Jeanne Peiffer (Paris: Seuil, 1995) 415pp. Dürer's 1525 original is not an academic geometry but an instruction manual in geometrical drawing and measuring techniques for artists and artisans


Richard KNIGHT, "A Carpenter's Rule from the Mary Rose ", Tools & Trades (Tool and Trades History Society), vol.6, August 1990, pp.43-55


Mark REES, "Not So Much a Rule - More a Vade Mecum ", TATHS Newsletter (Tool and Trades History Society), no.45, Spring 1994, pp.35-38

David L. ROBERTS, "Romancing the Root: An Episode in the Promotion of Geometric Aids for
Arithmetic Instruction", Rittenhouse, vol.7 no.2, February 1993, pp.33-36 The cube root block, for demonstrating the extraction of cube roots in mathematics teaching


M. Isabel VICENTE MAROTO & Mariano ESTEBAN PIÑEIRO, Aspectos de la ciencia aplicada en la España del Siglo de Oro (Salamanca: Junta de Castilla y León, Consejería de Cultura y Bienestar Social, 1991) 533pp. Instruments and applied mathematics in 16th-century Spain, especially under Philip II

Deborah Jean WARNER, "Cathetometers and Precision Measurement: The History of an Upright Ruler ", Rittenhouse, vol.7 no.3, May 1993, pp.65-75

Andrew WARWICK, "The Laboratory of Theory or What's Exact about the Exact Sciences? ", in M. Norton Wise (ed.), The Values of Precision (Princeton, New Jersey: Princeton University Press, 1995), pp.311-351 Introduction of the use of mechanical calculators in the late 19th century


MEDICAL & SURGICAL INSTRUMENTS see also: pharmacy; optics & optical instruments; X-rays


Alexander de BRUIN, "Instrumenten ter Redding van Drenkelingen uit Engeland ontbooden": Over een 18de-eeuws reanimatiesetje in de collectie van het oude St. Elisabeth's of Groote Gasthuis te Haarlem ", Teylers Magazijn (Teylers Museum, Haarlem), no.39, summer 1993, pp.7-11

Marie-Véronique CLIN, "Le Musée d'histoire de la médecine ", La Revue (Musée des Arts et Métiers, Paris), no.13, December 1995, pp.36-40


Hugh PETRIE, The Surgeon's Box Opened (Bristol: Stuart Press, 1995) 22pp. Early 17th-century English surgical instruments and procedures (written for those who wish to re-enact them!)


METEOROLOGICAL INSTRUMENTS

Marjorie BERRY, "Barometers: A Boon to Farmers", Rittenhouse, vol.4 no.4, August 1990, pp.97-101

Deborah Jean WARNER, "Americans Encounter Aneroids", Rittenhouse, vol.9 no.4, August 1995, pp.120-128


METROLOGY (weighing & weighing instruments only)


D. F. CRAWFORTH, "Pre-1700 England: Some Thoughts on Pre-1700 English Scales & Weights", 3 parts, Equilibrium (International Society of Antique Scale Collectors), 1990 no.1,


MICROSCOPY & MICROSCOPES

Albert ABRAMSON, Zworykin, Pioneer of Television (Champaign, USA: University of Illinois Press, 1995) 319pp. Vladimir K. Zworykin (1889-1982), the Russian/American electronics pioneer, who contributed to the early development of electron microscopes, photoelectric cells,
facsimile machines, etc., as well as of television cameras and receivers


Lin QING, Zur Frühgeschichte des Elektronenmikroskops (Stuttgart: Verlag für Geschichte der Naturwissenschaften und Technik, 1995) 163pp. Invention (around 1930) and early development of the electron microscope


MILITARY INSTRUMENTS

Keynes), including early television receivers, aircraft compasses, military wireless sets, as well as radar equipment


R. N. SEARLE, Mirrors by the Sea - An Account of the Hythe Sound Mirror System (Hythe, Kent: Hythe Civic Society, 1995) 42pp. Six large acoustic mirrors erected in the 1920s and 1930s to detect enemy aircraft approaching the English coast


NATURAL & EXPERIMENTAL PHILOSOPHY - INSTRUMENTS & GENERAL STUDIES see also: physics - modern

George BISHOP, Eight Hundred Years of Physics Teaching (Basingstoke: Fisher Miller, 1994) 237pp. Mostly British physics teaching of the last 300 years

G. BOATO & G. BRUZZANITI, "Il Gabinetto di Fisica e la didattica a Genova tra la fine del '700 e l'inizio del '900 ", in Fabio Bevilacqua (ed.), I beni culturali scientifici nella storia e didattica (Pavia: Università degli Studi Pavia, 1993), pp.12-28


Thomas B. GREENSLADE jr., "Home Built Apparatus for Natural Philosophy ", Rittenhouse, vol.7 no.2, February 1993, pp.56-59 In American colleges


Pierre LÉNA (& others), "Le pendule de Foucault au Panthéon ", La Revue (Musée des Arts et Métiers, Paris), no.13, December 1995, pp.49-57


**NATURAL & EXPERIMENTAL PHILOSOPHY - LECTURE DEMONSTRATIONS & SHOWMANSHIP**


NAVIGATION & NAVIGATIONAL INSTRUMENTS

François BELLEC, "L'irritant problème de la longitude ", La Revue (Musée des Arts et Métiers, Paris), no.13, December 1995, pp.17-22. Illustrates several instruments, including Berthoud's chronometers of the 1760s.


COMMUNICATIONS & ELECTRONICS MUSEUM TRUST, The Guiding Hand: A Brief History of Allied Radar in World War II (Bristol: Communications & Electronics Museum Trust, 1994) 26pp. Catalogue of exhibits at the museum (which is at Bletchley Park, near Milton Keynes), including early television receivers, aircraft compasses, military wireless sets, as well as radar equipment.


OPTICS & OPTICAL INSTRUMENTS (see also: microscopy & microscopes; telescopes)


R. BECK, "Leica - For 140 Years in an Innovative Partnership with Forensic Medicine and Criminal Investigation: A Historical Review of Contributions by the Wetzlar Optical Industry ", 


PHARMACY

Rudolf E. A. DREY, "La décoration de vases de pharmacie italiens de la Renaissance d'après des gravures ", Revue d'histoire de la pharmacie, vol.4 part 1, 1994, pp.23-31


PHOTOGRAPHY & PHOTOGRAPHIC INSTRUMENTS


PHYSICS - MODERN

Robert E. FINNIGAN, "Quadrupole Mass Spectrometers: From Development to


PRECISION MECHANICS (including tools)


Johan KNUTSSON, "A Seventeenth Century Collection of Rose Engines and Tools: Notes on the Turning Room at Skokloster, Sweden ", Tools & Trades (Tool and Trades History Society), vol.6, August 1990, pp.10-22. About 2,000 tools for woodworking and clockmaking, from large lathes to small hand tools, mostly 17th-century.


**SCIENCE & TECHNOLOGY - GENERAL STUDIES (see also: mathematics & its applications; natural & experimental philosophy)**


**SCIENTIFIC INSTRUMENTS - GENERAL STUDIES**


M. Isabel VICENTE MAROTO & Mariano ESTEBAN PIÑEIRO, Aspectos de la ciencia aplicada en la España del Siglo de Oro (Salamanca: Junta de Castilla y León, Consejería de Cultura y Bienestar Social, 1991) 533pp. Instruments and applied mathematics in 16th-century Spain, especially under Philip II.

SCIENTIFIC INSTRUMENT MAKING - TECHNIQUES (see also: precision mechanics)


Johan KNUTSSON, "A Seventeenth Century Collection of Rose Engines and Tools: Notes on the Turning Room at Skokloster, Sweden ", Tools & Trades (Tool and Trades History Society), vol.6, August 1990, pp.10-22. About 2,000 tools for woodworking and clockmaking, from large lathes to small hand tools, mostly 17th-century.


**SCIENTIFIC INSTRUMENT MAKING - THE TRADE (see also: biographical studies - instrument makers & firms)**


**SPECTROSCOPY**


**SURVEYING**


TELEGRAPHY & WIRELESS


COMMUNICATIONS & ELECTRONICS MUSEUM TRUST, The Guiding Hand: A Brief History of Allied Radar in World War II (Bristol: Communications & Electronics Museum Trust, 1994) 26pp. Catalogue of exhibits at the museum (which is at Bletchley Park, near Milton Keynes), including early television receivers, aircraft compasses, military wireless sets, as well as radar equipment.


TELESCOPES


Albert van HELDEN, "Telescopes and Authority from Galileo to Cassini ", Osiris, vol.9, 1994, pp.8-29.


X-RAYS


