Uffenbach, Phillipp

*De quadratura circuli mechanici. Das ist, Ein Newer, Kurtzer, Hochnützlicher und leichter Mechanischer Tractat und bericht, von der Quadratur dess Circels, wie man solchen nützlich soll und kan gebrauchen. Allen der Geometrischen und Mechanischen Künsten Liebhabern zu beförderung und nutzen vorgerissen beschreiben mit etlichen Kupferstücken gezieret und vor augen gestellet und an jetzo durch öffentichen Truck publiciert und an tag gegeben ...*

Year: 1619  
Place: Frankfurt am main  
Publisher: Lucas Jennis  
Edition: 1st  
Language: German  
Figures: woodblock figure on title page, 5 engraved full-page plates  
Binding: later paper boards  
Pagination: pp. [12], 13–46  
Collation: A–E/F  
Size: 182x147 mm

Uffenbach was a German artist from Frankfurt. This short tract on means of squaring the circle is more concerned with practical matters than with theory. It deals, for example, with the layout of gear teeth and other design problems that would have been of concern to someone in Uffenbach’s profession.

Illustrations available:  
Title page  
Circle-squaring methods  
Design of gear teeth

Ungerer, Alfred


Year: 1931  
Place: Strasbourg  
Publisher: Ungerer  
Edition: 1st  
Language: French  
Binding: original boards; red leather label; gilt spine  
Pagination: pp. 514, [2]  
Size: 271x211 mm

Ungerer was a clock maker in Strasbourg. His family had been clock makers for generations and he dedicates this book to his ancestors, some of whom are pictured on the dedication page.

This is an illustrated history of timekeeping mechanisms. It concentrates on large public timepieces rather than smaller clocks found in the home. Beginning with a discussion of ancient water clocks and working up to
the early 1900s, it illustrates clocks from around the world. Most of the devices discussed are illustrated in photographs and only occasionally does the author give diagrams that show the inner mechanisms.

Illustrations available:
- Title page
- Colophon

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Giuseppe Unicorno (Jospehus Unicornus) was a mathematician from Bergamo in Italy.

This large and elaborate arithmetic had only this one edition. It is structured with two parts in one volume. Part One contains Books One through Four (Libro Primo to Libro Quarto) and the second part, with its own title page and table of contents, contains Books Five and Six. The work provides a trove of information but is too detailed for use as an elementary text. It gives, for example, six different methods of multiplication and illustrates them with examples designed to yield interesting patterns (693 x 481 = 333333, 900991 x 123321 = 111111111111, etc.). After dealing with the elementary operations, it discusses Boethian number theory, roots, the rule of three, commercial arithmetic and the application of arithmetic to games and music—all in great detail with numerous examples and problems for the student.

Illustrations available:
- Title page
- Colophon

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Illustrations available:
- Title page
- Colophon
Several of the major universities in the United States and Europe had either built or acquired a differential analyzer prior to World War II. The University of California—Los Angeles (UCLA) had managed to get the state to agree to purchase a differential analyzer in 1943 but because of the war, delivery from the manufacturer, General Electric Company, was delayed until 1947. When it was set up on the Los Angeles campus, it not only was applied to problems generated within the university but also was made available, for a fee, to industry. This booklet was written to be distributed to potential users to inform them of the machine’s availability.

The UCLA machine was large—fourteen integrators. The integrators were of the same type as those used by Bush and most others (for an exception see entry for Kusters, N.L.; The Ott differential analyzer, 1947) but this machine avoided the need for the torque amplifiers by using a photoelectric mechanism to detect rotations of the pickup wheel. This photoelectric system drove a large motor that provided the torque for subsequent operations. This machine operated until the early 1960s when it became easier to solve these problems on a digital computer than on an analog machine. Rumors persisted that the machine still existed in the year 2000 and one of us (Williams) set out to find it. After a lengthy enquiry, a technician (Grady) told us that one of his first jobs in 1968 was to cut up the machine and sent it to the scrap yard. This account has since been contradicted by a curator at the Smithsonian’s National Museum of American History who had told us that the machine is actually in a storage facility there.

Illustrations available:
- Title page
- Two photos of the differential analyzer

**U 5**

**Ursin, George Frederik** (1797–1849)

*Logarithmer med 6 decimaler for tallene fra 1 til 100000 for sinus og tangens for hver 10° tilsigem forskjellige constante logarithmer og tal, der ere af vigtighed i matematiken*

- **Year**: 1827
- **Place**: Copenhagen
- **Publisher**: Udgiverens Forlag
- **Edition**: 1st
- **Language**: Danish
- **Binding**: original cloth boards
- **Pagination**: pp. xxiv, [232]
- **Collation**: a⁷ b⁴ A⁴ B–P⁸
- **Size**: 211x127 mm
- **Reference**: Hend BMT, #133, p. 110

This is a standard set of six-figure logarithm tables.

Illustrations available:
- Title page

**U 6**

**Ursinus, Benjamin** (1587–1633/1634)

*Trigonometria cum magno logarithmorum canone*
Benjamin Ursinus (the Latin form of Behr, his family name) was a mathematics teacher in Berlin. His earlier publication of a small Napierian logarithm table in his *Cursus mathematici practici* had aroused Kepler’s interest and eventually resulted in the *Rudolphine Tables*. Ursinus, who was a friend of Kepler, assisted with the calculations for the *Rudolphine Tables*. Napier’s logarithms were not the same as those called Napierian today (which are to base $e$). If $L$ is the logarithm of a number as calculated by Napier and if $l$ is its equivalent logarithm to the base $e$, then the two are related by

$$L = 10^7 \log_{10} 10^7 - 10^7 l$$

Tables to the base 10 (by Briggs, Gunter and Vlacq) quickly displaced Napier’s logs. This table is the largest table of original Napierian logarithms that were produced. While Napier calculated his to every minute of the arc, Ursinus’s tables were to each ten seconds of arc and were eight decimal places while Napier’s were seven.

The book deals with how logarithms were calculated and their use in both plane and spherical trigonometry. The tables, which have a separate title page, are dated a year earlier than the text but were never issued independently.

**Illustrations available:**
- Title page
- Title page of tables
- Sample of tables
- Colophon

These are the tables mentioned in the entry for *Ursinus*, *Trigonometria*, 1625. The title page and a sample from the tables are illustrated in that entry.

**Illustrations available:**
- None

Year: 1626
Place: Nürnberg
Publisher: Simon Halbmayer
Edition: 1st
Language: German
Figures: engraved title page; 1 large folding plate
Binding: modern calf, blind-stamped covers
Pagination: pp. [16], 138, [2] (i.e p. 122–123 repeated)
Collation: )()()() A–R
Size: 191x156 mm