A truly regal copy of Apianus' Renaissance astronomy text

Petrus Apianus, *Astronomicum Caesareum*. Ingolstadt: Petrus Apianus, 1540. 19 1/2 inches x 13 1/8 inches (495 x 333 mm), 117 pages, 35 hand-colored woodcut volvelles, woodcut initials, hand-colored illustrations and tables throughout.

Published by its author Petrus Apianus (1495–1552), Astronomicum Caesareum (Emperor's Astronomy) is one of the great masterpieces of Renaissance printing. Apianus was an instrument-maker, astronomer, geographer, and printer, and his book was a comprehensive survey of contemporary planetary astronomy from the viewpoint of the new calculation technology. According to Owen Gingerich, it is "the most spectacular contribution of the bookmaker's art to sixteenth-century science." The most notable feature of this large folio volume is its series of volvelles, paper instruments that calculated astronomical, astrological, and calendarial data and planetary movements. Each of the thirty-five volvelles (from *volvre*, "to turn") is a circular paper construction layered and held together with string. Each of the woodcut discs, superimposed upon one another, contain mathematical indices representing the possible positions of the known planets, the sun, and the moon, dates in the calendar year, etc., thus enabling the reader to calculate, for instance, the position of Mercury on a particular day in a specific year. Each of the volvelles, some with as many as six components, was hand colored in brilliant hues in Apianus' studio. The beauty of this book distracts from its ultimate purpose as a sophisticated, functioning instrument, the most ambitious of the Renaissance. Astronomicum Caesareum also contains one of the earliest printed star charts, it chronicled the comet of 1531, later known as Halley's Comet, and it illustrated the phenomenon of comet tails pointing away from the sun.

Apianus dedicated *Astronomicum Caesareum* to the Emperor Charles V, who at the time ruled the largest territory in the history of the world. Apianus was Charles V's court astronomer and the dedication to him implied that his kingdom extended to the heavens. This superb copy in Bodleian Library, University of Oxford, is bound in seventeenth-century light brown calf decorated with a small blind-stamped floral border on all edges front and

back; the front and back covers have a blind-stamped diamond diaper pattern enclosed in a triple-ruled rectangle in the center. The spine has been rebacked with APIANI | ASTRON- | OMICA and seven horizontal triple rules in gold. An inscription on the title page "du Buisson" and an illegible library stamp on the verso are the only traces of former ownership.

Octavo code: appast