



End of an Odyssey

The book is a scruffy looking little thing, held easily in the palm of one hand. The printing is quaint, with the sort of hand-chiseled elegance usually reserved for old Bibles. As a visitor, you feel a tendency to lower your voice in its presence, to wipe your hands before touching it. There's a lingering mustiness about it, as well there should be, for this book is 320 years old.

If, in the midst of the 20th century's throw-away society, you can accept the miracle of this book's survival,

you should have no trouble accepting its presence at the University of Oklahoma as the 50,000th addition to the world's largest and best collections in the history of science.

Age and local pride of possession are not the book's only attributes, however. The curator of OU's History of Science Collections, Dr. Duane H. D. Roller, describes the first edition of *Observationes Anatomicae* by Nicolaus Steno as "a very rare little book . . . scientifically and historically significant." *Continued*

The 50,000th Volume

Published in 1662 and bound with another book on anatomy by Johannes van Horne, *Observationes Anatomicae* is a collection of four treatises recounting startling discoveries in Steno's study of glands. As a medical student in Denmark, Steno had plunged into the anatomical study of glands, the entire glandular lymphatic system and body fluids in general, and discovered a host of new glands in the palate, beneath the tongue, in the cheeks and nose. He also was the first to identify the lubricating function of tears.

Steno then focused his research on the muscles, defining the heart as an organ that is, in every respect, a muscle; next he turned to an exploration of the brain. As he worked, he traveled throughout Europe, exchanging information with the outstanding scientists of his day.

"Steno is a very interesting person historically," Roller says. "He began his studies with an interest in himself, the body; then moved to a study of all animals; then the whole world and its history; and then theology, completing his life as a priest."

His writings reflect this intellectual movement. Applying his anatomical approach to the study of the earth's crust, Steno hypothesized that all objects shaped like organic remains are organic in origin, even though the material of which they are composed is no longer organic: thus, the theory of fossils. Fascinated with the process of the formation of objects in nature, he postulated that any object found within a continuous mass of material must have been produced before the surrounding material.

"This in turn led him to the study of the production of strata," Roller explains, "and he stated the idea that the earth has a history and that strata represent its time sequences." Steno's statement of the basic principles of sedimentation was fundamental to the history of geology.

Observationes Anatomicae is not the only Steno work in the History of Science Collections. An exhibit in February celebrating the 50,000-volume milestone featured 19 Steno-related items — his first eight books, all but two of which are 17th

century first editions; later reprints of his books; letters by Steno; and microprints of some of his writings. Indeed, it would be almost impossible today to mention an author important to the history of science who is not represented in the collections. Roller delights in casually pulling from the shelves of rare books Galileo's own personal copy of his major work, dated 1610, with marginal notes in the author's own handwriting, or Copernicus or Kepler or any other giant in the development of science.



Dr. Duane H. D. Roller

The University was propelled into the rare book business in 1949 when Everette Lee DeGolyer of Dallas, the father of geophysics and one of OU's most illustrious alumni, gave his alma mater 600 meticulously selected volumes and funds to purchase more. The only condition which DeGolyer placed on his gift was that the University establish a teaching program in the history of science to utilize properly these extraordinary resources.

The collections numbered about 5,000 volumes in 1954 when Roller came from Harvard as curator and assistant professor. OU President G. L. Cross saw development of this research and teaching center as too good an opportunity to miss and found private support to begin Roller's annual summer trips to Europe in search of books. By the time other libraries began to get into the act, the University of Oklahoma already had a commanding lead.

Private philanthropy has added other collections to the DeGolyer books, bearing such names as Crew, Klopsteg, Hall, Nielsen, Lacy and Alumni Development Fund. Operational support for both the collections and the teaching program comes from the University budget and occasional outside grants.

In the 32 years since DeGolyer's initial gift, Roller has pursued relentlessly the acquisition of the printed writings of scientists, in both monographic and periodical form, in every edition. But supporting materials are being acquired as well: science textbooks and popular works on science, encyclopedias, dictionaries, bibliographical works, biographies of scientists, history of science journals, histories of science, histories of individual sciences, and histories of scientific institutions. The collections also include a substantial number of portraits of scientists and slides relevant to the history of science.

The preservation of these priceless resources will be enhanced this summer when the collections are moved into specially designed facilities in the new Doris W. Neustadt Wing of Bizzell Memorial Library. Located on the top floor of the new addition, the History of Science Collections will have space to expand to 100,000 volumes, with special lighting, temperature and humidity control and a controlled access room for the especially rare, fragile and valuable books.

In these new quarters the Steno volume—Volume No. 50,000—will reach the end of its odyssey, contributing to the study of the history of science today as it did to the expansion of science over 300 years ago.

—CAROL J. BURR