

Michael Stifel, "Arithmetic," 1544. Stifel was reformer and one of the most skilful arithmeticians of his time. The library has several editions of his books.

Johann Scheubel, first edition, 1545. Scheubel was born in 1494 and died in 1570. He was professor of mathematics at Tübingen. He wrote on arithmetic and algebra, and edited part of Euclid.

I have also the first edition of the rare Spanish arithmetic by Gaspard de Texeda, 1546. Here the fundamental processes with integers, fractions and denominate numbers are given.

Nicolo Tartaglia, "General Trattato," first edition, 1556. Tartaglia was born at Brescia in 1506 and died at Venice in 1559. He was one of the best mathematicians of his time, and his connection with the general solution of the cubic equation is well known.

Iean Trenchant, first edition, 1566. One of the best of the sixteenth century text-book makers of commercial arithmetics in France. The book was divided into three parts, the first dealing with the fundamental operations with integers and fractions; the second treats of the rule of three in its various forms; and the third treats of the properties of numbers, including figurate roots and progressions, and has some work on discount.

The second important arithmetic printed in the English language was by Humphrey Baker, 1568. It is called "The Well Spring of Sciences, which teacheth the perfect worke and practise of Arithmetike, both in whole Numbers and Fractions." Baker's work was a rival to Robert Recorde's "Ground of Artes." He has chapters on merchandise, fellowship, barter, alligation, false position and the like.

A rather interesting edition of Petrus Ramus's Arithmetic, which has on the title page in the handwriting of the author the inscription, giving it to his pupil Johannes Sturm, the famous German scholar.

Another interesting arithmetic is that by Leonard and Thomas Digges, first edition, 1572. There are only about twenty pages that are arithmetic. Then follows a brief treatment of algebra, after which are certain matters relating to military affairs. Leonard Digges was born at Barham, Kent, and studied at Oxford. He died in 1571. Thomas was a son of Leonard, and was also born in Kent and educated at Oxford. He died in 1595.

There was a very interesting arithmetic by Thomas Masterson, London, 1592. This book, however, does not make any particular contribution to the subject of arithmetic. Book I is on the fundamental operations with integers and fractions; Book II is a collection of practical problems representing the mercantile activities of London; and Book III refers

chiefly to irrational numbers, which would now be considered algebra.

Frisius, Cardan, Trenchant and Bombelli, of the seventeenth and eighteenth century writers, the most important ones, judged from the standpoint of their text-books, are generally included. There are first editions of most of their works, but the list is too long to be given at this time.

The library has always been open freely to scholars, and for many years it has been used by them in the preparation of theses and of books.

I am often asked what my plans are for the future of this library, and the matter is so important for students of the history of mathematics that the question deserves a reply. I do not believe that it is for the best interests of the world, at least for the United States, that such libraries as are now in my country should be dispersed. Collectors and booksellers may wish them to go to the auction rooms, but it seems to me that a library like mine should be kept intact for the use of scholars. This I propose shall be done in this case, provision being made for its preservation and growth in one of our large universities.

GEORGE A. PLIMPTON

NEW YORK, N. Y.

ANDREW HENRY PATTERSON 1870-1928

As a result of the death on September 9 of Andrew Henry Patterson, dean of the University of North Carolina's School of Applied Science and professor of physics, the South has lost one of its ablest educators and men of science.

Dr. Patterson was born September 28, 1870, at Winston-Salem, North Carolina. He received a liberal education in the arts and sciences, taking his Ph.B. and a B.E. at the University of North Carolina in 1891. In order to broaden his scientific education he entered Harvard, at which institution he took his A.B. in 1892, remaining there the following year for his M.A., with a thesis on "High Tension Phenomena."

The next year found him as a student engineer and electrician with the Consolidated Traction Co., of New Jersey, whence he joined the faculty of the University of Georgia as instructor of physics, thus reverting to his original plans for which his education had best fitted him. His success as a teacher was at once recognized by his promotion to an adjunct professorship in 1897 and to professor of physics in 1898.

His first sabbatical leave in 1905 was spent at Berlin and at the Charlottenburg Technische Hochschule, where he devoted himself to the study of electrical engineering.

He was called to the University of North Carolina as professor of physics in 1908 and was appointed dean of the School of Applied Science in 1911.

Dr. Patterson's training and experience were broad and his interests were many. He wrote many essays on cultural, educational and scientific subjects. He was an acute thinker and a most delightful teacher. His gentleness and sincerity, his readiness to give aid, his sympathetic and appreciative nature endeared him to his colleagues and students.

He was a fellow of the American Association for the Advancement of Science, the American Physical Society and a member of the North Carolina Academy of Science. He served at various times as president of the Elisha Mitchell Scientific Society and of the North Carolina Academy of Science (1919).

The University of Georgia conferred the doctorate of science on him *pro honoris causa* in recognition of his educational and scientific work.

His best known contributions covered the fields of X-rays, high tension phenomena, lightning discharges and atomic structure.

He is survived by his wife, Eleanor Alexander Patterson; his daughter, Mrs. Samuel J. Fisher, of Asheville, and his son, Dr. Howard Alexander Patterson, just entering the practice of surgery in New York, and four brothers—Frank Patterson, editor of the Baltimore *Sun*; Rufus L. Patterson and Edmund V. Patterson, of New York, and John L. Patterson, of Richmond, Virginia.

OTTO STUHLMAN, JR.

THE UNIVERSITY OF NORTH CAROLINA

SCIENTIFIC EVENTS

BIOLOGICAL FARM OF THE WISTAR INSTITUTE

FACILITIES for biological research at The Wistar Institute have been recently increased by the acquisition of an additional research foundation consisting of a farm of 150 acres, situated in a quiet region of the country in Bucks County, Pennsylvania, between Philadelphia and Trenton, twenty-seven miles from the institute's present museum and laboratory buildings in Philadelphia.

This farm, with a modern equipment of farm buildings, machinery, live stock and other essentials, is the gift of Effingham B. Morris, LL.D., president of The Wistar Institute. It comprises about one third of an original grant under patent from William Penn. Mr. Morris now represents the seventh generation in the course of its inherited ownership, and he will continue to farm the two thirds of the acreage retained by him.

In the deed of gift, dated August 11, 1928, establishing the Farm Foundation, Mr. Morris expresses

in liberal terms his desire to aid in promoting the research work of The Wistar Institute, as established and conducted under the deeds of gift of General Isaac J. Wistar, who was his kinsman.

The necessary laboratory facilities for experimental work with mammals and other organisms will be provided. Colonies of several species of small mammals for research purposes will be maintained on the farm. Studies will probably be extended to other animals, especially such domestic animals as cattle, horses, sheep, hogs, dogs and poultry.

By the provisions of Mr. Morris's deed of gift, the study of living forms will not be confined to animal life; but, following the modern trend of biological research, opportunities will be afforded for the study of both animal and plant life. Facilities for the study of fresh-water aquatic forms will be unusual.

While the initial equipment for work will not be pretentious, at the same time it will be modern in every respect and subject to such growth and development as the work may indicate. Mr. Morris has made a cash contribution toward these initial expenditures. This farm will be known as "The Effingham B. Morris Biological Farm of The Wistar Institute of Anatomy and Biology."

One of the advantages of the location is the isolation from noise and other physical disturbances. Living accommodations for investigators with families can be arranged for in the neighborhood; and it is hoped that in due course the old Colonial red-and-black-brick farmhouse on the property can be arranged for use as a residence club house for men who wish to remain on the farm continuously during the periods of their investigations. It is expected that the farm will be ready for initial use early in the spring of 1929.

THE ABBE MEMORIAL MUSEUM AT BAR HARBOR

ON Tuesday, August 14, 1928, the Abbe Memorial Museum was dedicated in the presence of some hundreds of persons. There were three short addresses. The Honorable L. B. Deasy, lifetime friend of Dr. Abbe and treasurer of the museum corporation, a permanent resident of Bar Harbor, accepted the museum on behalf of the citizens of Mount Desert Island. The Right Reverend William Lawrence, Bishop of Massachusetts, paid high tribute to the life and character of Dr. Robert Abbe. Dr. Warren K. Moorehead described briefly the life of the aboriginal inhabitants of Mount Desert, contrasting the past with the present.

At the conclusion of the speeches a bugler stationed by the famous *Sieur de Monts* spring sounded taps, and another bugler far up on the mountainside echoed taps.