NOTES FROM THE LIBRARY

ALLINSON FARM DIARIES

To the Rutgers Library's growing collection of farm diaries is now added a significant gift from Miss Caroline Allinson of Yardville. It is a set of farm records and diaries kept from 1825 to 1883 by her father, Samuel Allinson, of Locust Hill, the ancestral estate where Miss Allinson still resides.

These diaries are unique, not only in the unbroken record of farm operations for more than a half-century, but also for the reason that they cover a period when American farm life was experiencing revolutionary changes. They are valuable source material for the student of agricul-

tural history.

The collection is of further interest because of the role played by the Allinson family in New Jersey history. Samuel Allinson's grandfather and namesake, distinguished Quaker of Burlington, was active in the affairs of Colonial New Jersey. He was at one time a partner of Charles Read, the Colonial Secretary, and was executor of the latter's estate. He is perhaps best known for his compilation of New Jersey Laws. The elder Samuel's son David edited the agricultural-literary magazine, Rural Visitor, a file of which Miss Allinson some time ago presented to the Rutgers Library. Miss Allinson's late brother Josiah T. Allinson was for many years a member of the Board of Visitors of the State Agricultural College.

In addition to the farm records, Samuel Allinson's diary contains comment upon passing events. A choice item is a contemporary account of one of the strangest coincidences in American history—the deaths of Thomas Jefferson and of John Adams on the fiftieth anniversary of the signing of the Declaration of Independence. The following quotation is from the entries for July, 1826:

"July 4th. Fifty years have just passed since the declaration of the freedom of these United States from the galling yoke of Britain. Of those who signed it, three alone are left. Adams, Jefferson & Carroll still survive, but they are the veterans of departed years & 'Stand on the verge of dark Eternity.'

"5th. Three persons were yesterday drowned by a wherry being run over by a team-boat in the evening.

"6th. Met Uncle Samuel in the street. He arrived 2 or 3 days since from New Orleans in good health.

"7th. Thomas Jefferson is numbered with the silent dead. On the 50th anniversary of our national independence he ended a long & useful life at about 10 minutes before 1 o'clock P.M. aged 83 years.

"8th. 'By Helles' stream there is a voice of wail

And woman's eye is wet man's cheek is pale.'

John Adams also now sleeps with his fathers. On the day of the nation's Jubilee, surrounded by the rejoicing & festivities of the occasion, these veteran statesmen breathed their last breath. What a remarkable coincidence!!! Adams died about ½ past 6 o'clock P.M.

"11th. Beheld 'Our Great Father, the President of the United States.' J. Quincy Adams. He was on board the steamboat on his way to Quincy. (He received the tidings of his father's death on the road.)"

With source materials such as this continually accumulating, the Rutgers Library is becoming an increasingly important depository of original documents relating to the history of New Jersey.

CARL R. WOODWARD

THEODORE STRONG—HIS LIBRARY

Two or three years ago the University was the recipient of the library of Theodore Strong (1790-1869), professor of mathematics at Rutgers from 1827 to 1863. The collection was presented by the family of his grandson, the late Honorable Theodore Strong, class of 1883. The gift is highly valued for the wide range of subjects indicated by the volumes, because it contains some of the early classics in pure and applied mathematics, treatises written by the brilliant mathematicians of the eighteenth and early part of the nineteenth centuries, and because it furnishes an index of the quality of mind of the owner and of his keen interest in profound subjects. Many of the volumes are on natural and moral philosophy and religion. In recognition of the brilliance of his mind and of his scholarly interest in philosophy and religion as well as in mathematics, the college conferred upon him the honorary degree of LL.D in 1835.

Professor Strong was a forceful, dominant influence in the college for more than thirty years. Let me quote from the address by Dr. Rush Van Dyke before the alumni, June 16, 1868. "Of all the Faculty in my day, alone remains Professor Strong; whose forte appeared to be the production of the largest results by the continued and continuous addition of the smallest increments, over the portal of whose class-room, the golden legend seemed inscribed, 'Who teaches slow and deeply, teaches quickly best.'"

It is quite a significant fact that George William Hill, one of the most distinguished mathematicians whom this country has produced, should have come under the influence of Dr. Strong in the closing years of Strong's active career. Young Hill found himself in the presence of and under the friendly and stimulating guidance of Theodore Strong and was given the freedom of the library of this scholar and teacher. Hill's own account of that influence is as follows: "Having shown some aptitude for mathematics it was decided to send me to college; and, in October, 1855, I took up residence at Rutgers College, New Brunswick, N. J. Here I found Dr. Theodore Strong, professor of mathematics, who was a friend of Dr. Nathaniel Bowditch, the translator of Laplace's Mécanique Céleste. I remember seeing in Dr. Strong's library the presentation copy of this work. Under his guidance, I read such books as Lacroix, Traité du Calcul Différential et Intégral; Poisson, Traité de Mécanique; Pontecoulant, Théorie Analytique du Systeme du Monde; Laplace, Mécanique Céleste; Lagrange Mécanique Analytique; Legendre, Fonctions Elliptiques. My professor was an oldfashioned man; he liked to go back to Leonard Euler for all his theorems; as he said, 'Euler is our Great Master'." Hill had been admitted to Rutgers College by virtue of his scholastic tests, but was soon admitted to a university when he was given access to Strong's library.

Carlyle has said, "The true university of these days is a collection of books." What were some of these books? There was the calculus by S. F. Lacroix, who lived from 1765 to 1843. This book, the result of years of immense labor, was a compilation of the researches in the subject prior to 1797. It is upon this work that the fame of Lacroix as a mathematician rests. Laplace said that it had cost him ten years of labor to obtain the material which was contained in his volume. A book like this in the hands of such a student as Hill would do much in advancing his mathematical interests. There was Gummere's treatise on astronomy, published a dozen or so years before Hill entered Rutgers. The reading of this book no doubt kindled his interest in the study of the heavenly bodies. The algebra by Benjamin Peirce of Harvard, a standard work of that day, furnished him with manipulative and analytic machinery so necessary in his later researches. His mind was being stored with knowledge that would enhance the appreciation of the work of Laplace (1749-1825) in celestial mechanics, of Legendre (1752-1833) in elliptic functions and analysis, and of Lagrange (1736–1813) in analytic mechanics. These men were the mathematical giants of their time, and had all made important contributions to science as young men, Lagrange when he was

only nineteen. These were some of the books which, made available to him in the library of Strong, had a pronounced effect upon the life interest of George William Hill.

Perhaps the one book, more than any other of this collection, which had the effect of starting Hill on his destined career in the field of dynamical astronomy was the volume on Céleste Mécanique by Laplace. The effect of the study of this volume on astronomy and mechanics, together with the reading of other books in the collection, was that he began independent research while an undergraduate. The first product of this independent study was the publication, in 1861, of an article on the extension of Laplace's investigation of the figure of the earth. All the rest of his life he continued his investigations in dynamical astronomy with unabated vigor and mental acumen, even into his seventy-fifth year. The results of fifty years of labor in this field have added greatly to the science. Four quarto volumes of his collected works have been published, while, according to R. S. Woodward, writing of him in the Astronomical Journal for June 5, 1914, there is among his papers material for a fifth. Had Strong lived to know the brilliant achievements of his pupil, what satisfaction it would have been to him to know that he had been instrumental in opening the scientific door to this young man who was later acclaimed one of the world's outstanding mathematicians.

In his Reminiscenses of College Days at Rutgers, 1833 to 1836, Professor George W. Coakley, Class of 1836, speaks of the wide range of subjects taught by Professor Strong to the four classes. The list included algebra, Euclidean geometry, trigonometry, navigation, surveying, Cartesian geometry, both the differential and integral calculus, mechanics, political and mathematical geography, and astronomy and physics. He goes on to say that Professor Strong was a mathematical genius, the compeer in attainments and ability of the first mathematicians of his day, the acknowledged equal of Bowditch, of Professors Adrian of Rutgers, and Anderson of Columbia College, Peirce of Harvard, or any other distinguished mathematicians of this country. Professor Strong was persistent in solving problems in all the mathematical periodicals of this land in his day. He was a student of all the treatises on higher mathematics of Europe whether in French, Italian, or Latin, as well as English. Professor Coakley had read many of Strong's solutions of problems, and these he says bore unmistakable evidence of his intimate acquaintance with the works of the European writers on mathematics, and indeed exhibited complete mastery of these works as well as original skill.

In his "Reminiscenses of the Long Ago," published in the Targum in May, 1896, Principal Albert Wells, Class of 1831, has the following to say of Professor Strong. "With the stern sentiments of moral and religious obligation, indicative of his native state, he was a hard student and a faithful mentor to the young men. In pure mathematics 'he ranked among the ablest.' He succeeded in solving, by direct method, the irreducible case of the cubic equations left by Cardan. (See his Higher Algebra, page 464 (2).) He also discovered a method of extracting, by the direct process, any root of an integral number. (See his Higher Algebra, page 288 (8).) He was the author of Higher Algebra, 1859, Differential and Integral Calculus, 1869, and many contributions to current scientific periodicals." His algebra was published near the end of his active career, and the calculus in the year of his decease, both exhibiting careful research and matured skill in their making.

Dr. Strong's original investigations and mathematical papers won for him wide recognition. He was made a member of the American Philosophical Society and the American Academy of Arts and Sciences. When the National Academy of Sciences, the highest scientific body in the land, was formed, he was appointed by Congress as one of its corporate members. His worth, as a leader in science and as one influential in laying sound foundations, was recognized and honored.

RICHARD MORRIS

RUTGERS PUBLICATION

CARL RAYMOND WOODWARD. Ploughs and Politicks. Charles Read of New Jersey and His Notes on Agriculture. New Brunswick, Rutgers University Press, 1941 (Rutgers University Studies in History, Number Two) xxvi, 468 pp.

THE chronicle of seed-time and harvest, of sowing and reaping, of the herds and of the barnyards, this might seem prosaic enough. Yet this volume of agricultural history is an evidence that it can be quite the contrary. In fact it is a mystery story in true detective fashion of how an historian went out to find a farm and discovered a man.

Benjamin Franklin was reputed to be the owner of a farm in New Iersey, but no one knew where. Dr. Woodward, New Jersey's agricultural historian, undertook to find out. In the course of his search, one of the county agents brought him a huge and ancient tome, generously interleaved and annotated. This was an English agricultural handbook of the seventeenth century and the notes and interleavings were notes and additions embodying eighteenth century colonial practice. By clever analysis and criticism, Woodward discovered therein the secret of the farm, namely that the land like the book were the property of Charles Read of Burlington, N. J.

This adventure in historical discovery led the author to develop a three-fold plan for this book. He would write a biography of Read, he would make a contribution to colonial agricultural history based on extensive research, and he would reproduce Read's notes. Writing the biography led him into many channels, for Read was a man of many talents and interests.

In the first part of the book, there is the biography. After an introductory chapter outlining Read's career chronologically, there is a series dealing with the various phases of his career as farmer, iron master, customs collector, politician, judge, et cetera. Each of these chapters places this type of interest in its general social and economic setting, making up an excellent picture of the New Jersey life of the time. The

second part is a technical discussion of the agricultural practices of the community illustrated by Read's notes. The book, therefore, is biography, history, documentary material all in one. In each one of these branches it is significant and enlightening; much historical knowledge is displayed and an interesting biography is presented to the general reader. Its technical aspects make it a work that no agricultural historian can safely overlook.

Above all the book is significant because it gives us another example of a type of citizen now almost extinct. Read like Franklin represents that versatility which is a characteristic of the more leisurely, less specialized days of American colonial experience. These men had time to become masters of a variety of interests. In this case, one who might be termed the Boss of New Jersey in the 1750's and early 1760's was spending much time, thought and energy on the many problems of husbandry, as well as engaging in sundry business ventures, and on the side, having an eye out for the ladies.

In these hectic days when life goes by so rapidly, it is well to take a little time to ponder on the nature of life in that earlier day of Franklin and Read.

In closing it is most appropriate to call attention to the excellent workmanship of the bookmaking. It adds to the laurels heretofore won by the Rutgers Press.

Roy F. Nichols