The Philosophical Society of Texas

PROCEEDINGS
of the Centennial Meetings

1937

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of

The Philosophical Society of Texas

held at

LIENDO PLANTATION, WALLER COUNTY, AND AT HOUSTON

on

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THE CENTENNIAL MEETINGS of The Philosophical Society of Texas were held in two places, on Saturday, December 4, 1937. The first meeting was held in the afternoon at Liendo Plantation, early home of Edmund Montgomery and Elisabeth Ney, east of Hempstead in Waller County; the Banquet and Annual Meeting were held in the Rice Hotel in Houston in the evening. The Liendo meeting was devoted to a commemoration of the work in Texas of Montgomery and Ney.

A Luncheon was served at noon at the Prairie View State Normal and Industrial College. During the luncheon, a much-appreciated program of songs and Negro spirituals was rendered by the College choir. After luncheon, the members gathered at Liendo, where the afternoon program was given.

Members present at Liendo were Messrs. Rhea, Stephens, Geiser, Wrather, Battle, George A. Hill, Jr., Wharton, Lamar, and Potts; and Mrs. Baker. Guests included Mrs. W. A. Rhea, Mrs. C. S. Potts, Mrs. I. K. Stephens, Mrs. W. E. Wrather, Mrs. S. W. Geiser, Miss Ann Prescott Toomey, Miss Winnie Allen, Mrs. George P. Garrison, and a number of others. Dean Charles Shirley Potts, president of the Society, presided.

INTRODUCTORY REMARKS BY THE PRESIDENT

Members of the Philosophical Society of Texas, Ladies and Gentlemen:

WE HAVE met today to do honor as best we may to two former owners and occupants of this house, Dr. Edmund Duncan Montgomery and his wife, Elisabet Ney, our greatest philosopher and our most noted sculptress.

Before presenting the first speaker perhaps it will not be inappropriate for me to give a brief historical sketch of this fine old homestead, for in the days before the Civil War it more nearly than any other Texian home typified the baronial life of the prosperous planters of the ante-bellum South.

Its first Anglo-American owner was Colonel Leonard W. Groce. His father, Jared E. Groce, was one of Stephen F. Austin's early colonists, and brought with him to Texas, in addition to his wife and several children, more than a hundred slaves. Securing a large grant of land on the east bank of the Brazos he built his home, called Bernardo, a few miles south of the present town of Hempstead. Here, in spite of hard times and Indian raids, he developed a great ranch and plantation that was the center of the social and political life of colonial days.

Three years before the outbreak of the Texian Revolution, Jared Groce built for himself a new home north of Hempstead, which he called Groce's Retreat, and turned over the management of his great estate and the home at "Bernardo" to his son Leonard, who during the Revolution was commissioned Colonel. During that struggle Leonard Groce

rendered invaluable aid to General Sam Houston and his army, by furnishing, for two weeks, a home for the General and camping ground and ample provisions for the men after their long, trying retreat from Gonzales before the victorious forces of Santa Anna. This respite, by renewing the drooping spirits of the patriot army and by restoring some measure of discipline which had been badly shattered by the events of the preceding weeks, prepared the way for the great victory at San Jacinto a week later.

After the war, Colonel Groce sems to have prospered and we find him adding to his large land holdings until at one time he held 75,000 or 80,000 acres of land, some three hundred slaves, and the catttle on a thousand hills. It is said that at one period prior to the Civil War the income from his cattle and his cotton amounted to as much as $100,000.

But to return to "Liendo." The spot on which we are now assembled was a part of a large tract of land granted by the Mexican Government to one José Justo Liendo. In 1841, Thomas F. McKinney, as attorney in fact for Liendo, sold to Colonel Leonard Groce a portion of his estate bordering on Pond Creek, "supposed to contain 3,000 acres more or less." The purchase price, 50 cents per acre, is significant testimony of the abundance of land and the scarcity of settlers at the time. The remainder of the Liendo tract was acquired in 1849.

This house was built by Colonel Groce in 1853, as is shown by the date on the façade near the eaves. It is said than $1300 worth of lumber was shipped to Houston and laboriously hauled by oxen from there. Brick for the foundations and for the wine-cellar were made from the red clays on the banks of the Brazos. In addition to the main house

used as the family residence, there were many outhouses for the slaves, the stock and the like, and a large structure known as "Bachelors' Hall" for male guests.

"Liendo" was the social center of Texas in the ante-bellum period, as "Bernardo" had been during the pre-revolutionary period. But the great struggle of the 1860's brought that era to a close. With the emancipation of the slaves, Colonel Groce was thrown into bankruptcy, and the plantation for a short time passed from his hands. However, the purchasers at the sheriff's sale were unable to hold the place and it passed back to Colonel Groce, who continued to make it his home until his death in 1873. In that year, the portion of the place on which Liendo stands became the home of Dotor Montgomery and Miss Ney.

And here the story will be taken up by others. But as a last word let me say that those of us who have been active in the re-vival of the Philosophical Society of Texas, hope that in some way funds may be found to restore and preserve as a shrine this fine old home commemorative alike of the glamorous days of colonial and ante-bellum Texas, and of the two great spirits who, for forty years, lived and labored in these idyllic surroundings.

The president then presented Dr. Ira Kendrick Stephens, professor of philosophy at Southern Methodist University, who spoke as follows:

EDMUND MONTGOMERY

IRA KENDRICK STEPHENS

ON March 4, 1873, when culture was at a low ebb in Texas, Edmund Duncan Montgomery purchased Liendo plantation and for the next thirty-eight years this immense old manor house was his home, his laboratory and his study. It was here that he spent numerous hours every day, for months and years, in painstaking scientific research and in profound philosophical reflection; and the published results of these scholarly pursuits won for him the recognition and respect of a number of the world's great scientists and philosophers. But the people among whom he lived, both in this immediate community and in the State at large were, and still are, almost totally ignorant of his true merit as a scientist and a philosopher. There are many people living in this community today who knew Montgomery personally, and who still love and revere his memory. They knew him and remember him, however, as a prominent figure in the community, a handsome man of courtly manner and distinguished bearing; as a sympathetic and helpful citizen who took an active interest in every social enterprise intended to raise the cultural level of his fellow citizens; who never missed an opportunity to encourage their intellectual aspirations; and who, in spite of his own scholarly interests and high cultural attainments, was always willing, if necessary, to participate in the performance of the most prosaic tasks of the social group when to do so would promote their common good. He took a special interest in the promotion of the public schools of the community, and was intimately connected with the establishment and develop-

ment of the Prairie View State Normal and Industrial School in this locality. In the '90's he served two terms as County Commissioner in Waller County and, during his second term, built the steel bridge which spans the Brazos River between Hempstead and Bellville; he served several years as Secretary of the Melon Growers' Association of Waller County, and rendered valuable service in securing markets for the melon crops of the county; he organized a reading club, secured the back end of a jewelry store in the town of Hempstead for a reading room and supplied reading materials from his own library in an effort to enlighten his fellow citizens and to arouse their interest in the public issues of the day.

For these and other similar reasons, the people of Hempstead remember Montgomery. There was another side of his life, however, which they vaguely sensed but never understood. They were never able to appreciate his true value; never understood his deepest aspirations; never grasped the significance of his intellectual activities, which were to him matters of greatest concern and sources of greatest enjoyment. In almost complete isolation from personal intercourse with any one who was capable of understanding his problems or sharing his deeper interests, he pursued alone here at Liendo his scientific research and philosophical speculations. Though his friends respected and admired him, they could not help wondering why a man so brilliant, so highly educated, so cultured and refined, had settled down to spend his life in this State which, at that time, was almost destitute of those things which were of highest concern to him. It is concerning this side of Montgomery's life that I propose to talk to you this afternoon.

Montgomery was born in Edinburgh, Scotland, March

19, 1835. On his paternal side, he was descended from that ancient and famous Scottish clan,McNeill, which traces its lineage, through Irish tradition, back to Niall of Scythia, who, many centuries before the Christian Era, played an important rôle in the political and economic life of Egypt. According to the tradition, the descendants of this Niall, through a number of successive migrations, came to the Emerald Isle about the twelfth century, B. C., and, after several centuries of constant warfare, succeeded in extending their absolute sway over the whole of Ireland and Scotland. Between the years of 1030 and 1049, the McNeills, or Nialls, of Ulster, under the leadership of Niall, son of Aodh Aonrachan, settled on the Isle of Barra, in the outer Hebrides of Scotland, and from that date to the present their descendants have held extensive possessions in these isles and have played an important part in both Scottish and British political life.[1]

The McNeills of Colonsay and Oronsay, from whom Edmund Montgomery is descended, are a branch of this illustrious clan. It was founded by Donald of Crear, first of Colonsay, who, in the year 1700, acquired Colonsay and Oronsay from Archibald, I Duke of Argyle, in exchange for his lands of Crear. Duncan McNeill, father of Edmund Montgomery, was the second son of John McNeill, fifth of Colonsay. He was born on the Island of Oronsay in 1793; educated in the Universities of St. Andrews and Edinburgh; later studied law and was admitted to the Scottish Bar in 1816. Between 1824 and 1867 he held numerous offices of high rank in the British government, all of which he filled with distinction. In 1867 he retired and was raised to the

[1]See *The Clan Macneil*, by The Macneil of Barra, The Caledonian Publishing Company, New York.

peerage as Baron Colonsay and Oronsay, having purchased these estates from his older brother, Alexander, in 1848. He was a brilliant jurist and was raised to the peerage solely for the purpose of being constituted a member of the Court of Ultimate Appeals. He was the only jurist ever to enjoy this distinction. He died unmarried in 1874.[2]

Concerning Montgomery's lineage on the maternal side nothing at all is known. His mother's name was Isabella Davidson Montgomery. She is reputed to have been a woman of keen intellect and of rare beauty, and is known to have been an annuitant under the will of Duncan McNeill from 1874 to the time of her death.

While Montgomery was a mere infant, she took him to Paris where, at the age of four, he began his education by private tuition. This process continued for twelve years, five years in Paris, and seven years at Frankfurt-am-Main, in Germany. At the age of 17, he entered the University of Heidelberg as a medical student. His medical training involved a period of six years, three years at Heidelberg and one year each at Berlin, Bonn, and Würzburg. During this time he came into intimate contact with many of the leading thinkers of his day, both in science and in philosophy. Of special importance was his intimate contacts with such men as the great German physiologist, Moleschott, at Heidelberg; and Helmholtz, of Bonn, who for forty years held the scientific leadership of Europe.

Montgomery's native bent for scientific investigation and philosophical speculation, which he is said to have manifested even in his boyhood training, was greatly accentuated by his scientific studies and by his associations in these various uni-

[2]*Dictionary of National Biography*, (1909), Vol. 12, 691-2.

versities. His medical studies and extensive investigations of vital phenomena soon set his mind to reflecting on the philosophical problem concerning the nature and origin of life. The leading philosophers of Germany at this time were divided into two warring factions, the Idealists and the Materialists. Montgomery had intimate friends among the leaders in both camps and with these leaders he often discussed this fundamental problem. The more he conversed with them, however, the more he became convinced that neither school could supply an adequate basis for the solution of the problem. He was a staunch advocate of the theory of organic evolution, and believed that there is no essential gap between the inanimate and the animate. He believed that the animate could be explained in terms of the inanimate, provided the nature of the latter could be properly understood. His reflections on this problem convinced him that the abstract metaphysical speculations neither of the Idealists nor of the Materialists could ever determine the nature of either the animate or the inanimate, and, therefore, could never bridge the gap between the two. He left the University of Würzburg in 1858 with the firm conviction that this problem could be solved only by careful and studious scientific investigation of the simplest forms of life, and to this task he devoted a great part of his time and energy during the next twenty years of his life.

In 1860 he returned to England and for three years resided in London. During the first year, he was Resident Physician in the German Hospital. The next year he was Attendant Physician in the Bermondsay Dispensary. During this time, he also held a position as Curator of the Museum at St. Thomas's Hospital in London, where he maintained a research laboratory and spent much time in the microscopic

examination of morbid cells, attempting to determine the nature of the cell and its functional relation to the living organism. In addition to these activities he seems also to have maintained a private medical practice.

His work in London, both as a physician and as a laboratory man at St. Thomas's Hospital, must have been very successful; for, in 1862, he was made a member of the Royal College of Physicians, and in May, 1863, was recommended by the Faculty of St. Thomas's Hospital for appointment to a "Lectorship in Physiology" in that institution. For some reason, this nomination was not confirmed by the Grand Committee which met in May of the same year; but Montgomery continued to hold his position as Curator of the Museum and Demonstrator of Morbid Anatomy in the Hospital until November 3rd. of that year. He then resigned his position rather suddenly and left England for Madeira, where, in the British consulate at Funchal, he married, on November 17, Elisabet Ney,[3] whom he had met during his student days at Heidelberg. During the next two years he enjoyed a lucrative medical practice in Madeira; while Miss Ney, established in a handsome studio, pursued her creative art, executing during this time one of her most beautiful productions—the Sursum Group.

Leaving Madeira in the fall of 1865, they spent the winter months in Mentone, proceeding in the spring to Rome, which became their headquarters until the fall of the next year. During this time, Miss Ney spent several months at Caprera, executing the bust of the Italian patriot, Garibaldi.

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[3]This statement is based upon data concerning the marriage of Edmund Montgomery and Elisabet Ney recorded in the archives of the British Consulate at Funchal, Madeira. A copy of this record was sent to me in 1931 by J. B. Browne, British Consul at Funchal, Madeira.

In December of 1866, a scientific paper which Montgomery had written on the basis of his research at St. Thomas's Hospital was read before the Royal Society of London by Sir John Simon. This paper was published by Montgomery as his first scientific monograph during a visit to London the following summer. The paper was cited by the famous English biologist, Richard Owen, as "an important contribution to the philosophy of physiology." During this visit, Montgomery set up a laboratory in the Zoological Gardens of London where he carried on his biological research and, it is said, held frequent conversations with Charles Darwin, whose biological theories he vigorously attacked in a number of subsequently published articles.

Late in the fall of 1867, he again joined Miss Ney in Rome and, soon thereafter, they moved to Munich where they spent the next three years. In this inspiring environment and in the company of many of Germany's eminent philosophers, scientist, and artists, they achieved marked success in their respective lines of work and seem to have ridden the crest of a wave of social popularity such as they had never known before. Montgomery continued his biological research, the results of which were published in 1870. He also wrote his first important philosophical work, a vigorous criticism of the Kantian Philosophy. This book was published in Germany in 1871. Miss Ney, in a magnificent studio, continued her artistic work and achieved the peak of her career as an artist. She executed during this time many of her most important productions, including a bust of Bismarck and a statue of King Ludwig II of Bavaria.

In the late autumn of 1870, however, a drastic change occurred. For some seemingly unknown reason the Montgomerys suddenly decided to abandon the intellectual and

social atmosphere of this old-world center of culture and to cast their lot among the less cultured, pioneer people of the new world. They seem to have left Germany in December, 1870, and the next authentic account of their whereabouts places them at Thomasville, Georgia, in company with a German nobleman, Count Vicco von Strahlendorff, who had come to America some years previously, married a Miss Russell of Boston on October 10, 1870, and immediately thereafter settled on a farm near Thomasville, Georgia. In 1872, Montgomery purchased 400 acres of land four miles northwest of Thomasville. There was one house on the property, in which he and Miss Ney lived. The Count built a two-story log house on the same property, which he called the "log castle," in which he and his wife lived as intimate neighbors to the Montgomerys. The Montgomerys seem to have lived here at least two years, during which time the second of their two sons was born. Then, early in 1873, they left Georgia for Texas, and, on March 4th of that year, purchased and settled on Liendo Plantation. In this secluded spot, which already had the distinction of being the center of much of the romantic history of Texas, Montgomery spent the remainder of his life, pursuing his biological research and his philosophical speculation.

His first seven years at Liendo were devoted almost exclusively to the microscopic examination of different varieties of the simplest forms of life, in a continuation of his efforts to determine the nature of vital activities and to trace them to their origin. He used as a laboratory one of the large upstairs rooms of this immense old house, supplied with nothing except a table, a microscope, a set of dissecting instruments and the chemicals necessary for his work. The next twelve years were devoted to writing, expounding to the world his

scientific and philosophical theories and attempting to substantiate them by the results of his previous scientific investigations. The stream of essays coming from his pen during this period found space in the foremost scientific and philosophical journals in America, England, and Germany.

From 1893 to the end of the century, Montgomery did very little writing, due no doubt to economic conditions which made it necessary for him to devote much time to the business of the plantation. During the following ten years, however, he wrote and published three books. The first was published in 1904, and consists of a systematic statement of his previously published biological views. The second book, published in 1907, was his most considerable work. In it he attempts to solve various philosophical problems in terms of his theory of "vital organization," a theory which he formulated early in the '70's on the basis of his biological research. This theory is similar, in many respects, to the scientific theory of "emergent evolution," first systematically stated by C. Lloyd Morgan in 1922 and widely held today by outstanding scientists and philosophers. His third book of this period was published in 1910, just one year before his death.

In spite of his isolation here at Liendo, which limited his personal intercourse with men of science and philosophy, Montgomery, through his constant studies, his numerous publications, and his extensive correspondence with eminent men in these fields, kept abreast with the thought movements of his day and won recognition from a number of leading thinkers in America, England, and Germany. Charles Sanders Peirce, one of America's foremost thinkers and one among the first of those who, in the last quarter of the nineteenth Century, questioned the truth of the scientific dogma of universal causality, said of Montgomery: "I am

rejoiced to find, since my last paper was printed, that a philosopher as subtle and profound as Dr. Edmund Montgomery ("The Dependence of Quality on Specific Energies," *Mind*, O. S., Vol V, pp. 1-29) has long been arguing for the same element in the universe."[4] Other noted thinkers, such as William Salter, William James and E. D. Cope, in America; Sir John Simon, and Shadworth Hodgson, and others in England; and Helmholtz, Driesch, Haeckel, and Julius Kollman, in Germany, have all left recorded statements which express their respect for Montgomery's ability as a scientist and as a profound philosophical thinker. Many other thinkers of note in these various countries refer to him frequently as "the distinguished Scientist and Philosopher." He was a member of the Royal College of Physicians, the Aristotelian Society of London (honorary), the American Association for the Advancement of Science, the Concord School of Philosophy, the Free Religious Association of Boston, and the Texas Academy of Science, of which he was president in 1903. At the annual meetings of several of these learned societies, he frequently read papers, many of which received extravagant praise.

Neither the recognition which Montgomery received, however, nor the influence which he exerted on the world's thought were as extensive as the merit of his work in these fields deserves. This was possibly due to three causes; first, the fact that his theories were far in advance of the thought of his time and were out of harmony with the widely accepted scientific dogmas of that period; second, the fact that his

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[4] *Collected Papers of Charles Sanders Peirce*, Vol. VI, paragraph 238 n. For this reference, I am indebted to Mr. Morris T. Keeton, graduate student in the Department of Philosophy at Harvard University, who is writing his thesis for the Doctorate on *The Philosophy of Edmund Montgomery*.

style is extremely heavy, and his expressions terribly complex, making it difficult to follow his thought; and, third, the fact that, of the more than seventy scientific and philosophical articles and the five books which Mongomery published, all except two books and two articles bear the superscription, "Edmund Montgomery, Hempstead, Texas."

In the early summer of 1907, Montgomery's wife died at her studio in Austin, and the body was brought to Liendo for burial. A few months later Montgomery himself suffered a stroke of paralysis which left him practically helpless. As the years passed his condition grew gradually worse and his isolation and solitude became more and more pronounced. In spite of these facts, he continued his correspondence and his philosophical writings and seems never to have become discouraged or dissatisfied. In April, 1908, he wrote to his poet friend, Charles Alva Lane, of Alliance, Ohio; "soon after returning from Austin, my right side became completely paralyzed . . . my general health is good, my spirits never dejected. I live alone in the large colonial house, attended only by our faithful housekeeper, 74 years old, who has been with us for over 40 years . . . to save her as much work as possible, I have reduced my wants to a minimum and life is almost complete solitude, quite satisfied." Two months later he wrote; "I am now a prisoner for good, without hope of ever becoming able to leave my home again. I am, however, quite reconciled to it . . . I am inured to solitude, with no one congenial to exchange thoughts with, but I feel never depressed, or the time getting too long for me."

Then, on March 20th, 1910, but one year before his death, at the close of a scarcely legible letter, he wrote to Mr. Lane: "So, dear friend, I reluctantly today take leave from you . . . Ever yours, whatever remains of the old de-

crepit Edmund Montgomery." With these words he ended a long and extensive correspondence and shut the door to the outside world.

The tragic loneliness in which he seemed destined to spend the last year of his life was happily averted by the timely coming of Captain and Mrs. George W. Harris, who purchased Liendo in July, 1910. Their devotion to his interests during these last months of his life was exceeded only by that of his faithful old housekeeper, Cencie, who for forty years had found her chief delight in doing him service. He died on April 17, 1911, and was buried beside his artist wife in the little cemetery lot among the stately live-oaks near the old home. How fitting it is, then that the Philosophical Society of Texas, dedicated by its original founders to the collection and diffusion of knowledge, should honor the memory of this "Eminent Scholar, Gifted Experimental Biologist and Brilliant Speculative Philosopher," whose devotion to the pursuit of truth and knowledge inspired and directed his efforts throughout his entire active life and then continued to sustain him in a state of satisfaction and philosophical calm through the deprivations and solitude of his declining years!

President Potts: The next paper will be presented by that distinguished scholar, Dr. William James Battle, professor of classical languages, University of Texas.

A SIGNIFICANT FIGURE IN THE CULTURE OF TEXAS

W. J. Battle

THE history of Texas is full of striking personalities. Cabeza de Vaca the first explorer, Stephen F. Austin the founder, Sam Houston the statesman, Lamar the champion of education, Roberts the Governor and jurist and father of the University, Hogg the tribune of the people, Reagan the author of the bill establishing the Interstate Commerce Commission are some of the names that come at once to mind. And the lives of all these men were marked by tragedy. Cabeza de Vaca after all his terrific hardships failed of the ambition of his life. Austin died long before his time. Houston was driven from the Governor's chair and died in the midst of the war in which he foresaw defeat. Lamar lost his popular hold and died embittered. Roberts thought himself the victim of gross ingratitude from the institution which he had cherished. Hogg felt that he had lived too long. Reagan took deeply to heart his failure to win the governorship. For the interest and significance and tragedy of her life I venture to add to this company the sculptor Elisabet Ney. Her career presents an extraordinary picture of courage, struggle, and success, a life sinking in a cloud of bitter disappointment, the direct result of her faults of character. It had all the elements of a Greek tragedy—beauty, arrogant prosperity, retribution.

Elisabet Ney was born in Muenster, the capital of Westphalia, Germany, the 26th of January, 1833, one of the children of Johann Adam Ney and his wife Elisabeth Wernze, on her father's side a great niece of Marshal Ney.

Her father was a skillful wood-carver, a sculptor especially of religious subjects. Her mother was a handsome woman of great force of character. Both parents were religious people, devout Catholics, especially the mother. They seem to have been in comfortable circumstances, for they lived in a good house and gave their children a good education.

Elisabet was a beautiful child, healthy, strong, full of life. Very early she developed a marked personality, a strong will that nothing could break. She was fond of pretty clothes and had her own ideas about what she liked. When her playmates made fun of her frocks she cowed them into silence. She spent much time with her father at his work. No doubt he showed her how to use his tools and to fashion things for herself. At the age of seventeen she announced that she wanted to go to Berlin and study with the most famous sculptor of the day, Christian Rauch. She wanted also to meet the great people of the world. Her mother was horror-struck. Girls did not do such things. It was impossible for her to leave her home and go to a great city and associate with artists and risk losing her soul. Elisabet was determined. The mother would not yield. Finally the daughter announced that she would starve herself to death if she were not allowed to carry out her wish, and she actually began the process. The bishop was now called in but to no avail. In the end the mother compromised and consented for the daughter to go to Munich instead of Berlin. Munich was a Catholic city, and she might stay with a kinswoman who would look after her. So at the age of nineteen Elisabet went to Munich. Here more trouble came. When, after a period of private lessons, she applied for admission to the Academy of Arts, the director did not want her: He did not want any woman. "At least let me try," she pleaded. Probably moved

by her beauty he agreed to admit her on probation. Her work soon proved so good that she was awarded full membership.

Till now men had hardly entered into her life at all. She was wholly devoted to her art. But one day she saw in front of her a man so striking in appearance that even without seeing his face she felt a strange desire to meet him. He was a young Scotch medical student named Edmund Montgomery. Presently she did meet him, and they were soon in love. He was destined to be the strongest influence in her life.

Edmund Montgomery was the natural son of a very able Scotch lawyer, later a judge and a peer, who was greatly devoted to him and gave him every advantage. While still a boy Edmund developed agnostic tendencies and his unwillingness to conform to the orthodox atmosphere of his school led to a break with his associations and to study on the Continent. He adopted medicine as a profession and met with success as a practitioner. But his real interest was in biology, and he turned more and more towards its wider implications. Everywhere his noble head made him a marked man. Industry combined with intellect to secure him the friendship of men of the highest scientific position, and in the course of a long life he published many articles and several books of high distinction.

Of Edmund Montgomery's devotion to Elisabet Ney and hers to him there can be no question. He gratified her every wish. She always called him her best friend. Her charm brought her many lovers, but she rejected them all. For years she and Dr. Montgomery went their separate ways. She was a devotee of art, he of science. She was determined to win fame, to win it in her own name, and to keep it in her own name. After years of separation they came together

again and were married, but to the end of her days she called herself Miss Ney, and everybody else called her Miss Ney, even Dr. Montgomery. Scandal dogged her footsteps, but she gave no heed. It was nobody's business whether she was married or not. She was an artist and artists were above such considerations. She and Dr. Montgomery lived together as man and wive and children were born to them, but she never publicly admitted the marriage.

Miss Ney worked hard as a student in Munich and success crowned her efforts. But she still longed for Berlin, for study with Rauch, to know the great people of the world. In 1854 she really did go to Berlin and applied to Rauch to be accepted as his pupil. He was old and crabbed and did not want pupils, especially he did not want a woman. But Elisabet was persistent and Elisabet was extremely pretty. "Well, show me what you can do." Elisabet promptly brought a sketch and was promptly accepted. She had won again.

Her work till now had largely been on religious subjects, such things as the Martyrdom of St. Sebastian, the Resurrection, the Madonna. She now turned to portraiture, and here she found her real field. However, she did not devote herself wholly to portraiture. She did ideal pieces also: Germania, Victoria, Apollo, Diana. She was now fulfilling her other ambition also, for she was coming to know the great people of the world. She became a warm friend of Liszt's daughter, Cosima, the wife first of von Buelow and afterwards of Wagner. She had as a fellow pupil of Rauch the Crown Princess Victoria who snubbed her, but at least she knew her. After two years Rauch died and as his favorite pupil Elisabet was chosen to carry out several works that

had been intrusted to him, among them busts of Alexander von Humboldt, Jacob Grimm, and Joachim, the violinist.

"In the winter of 1859-60 she spent several months in the royal palace of Hanover. There she carried out the honorable commission to model a colossal bust of George V, the last King of Hanover. The successful execution of this work led to high recognition; George V was full of the highest praise. From the Queen of Hanover she received a costly gold bracelet as a gift." (Mueller-Muenster, *Elisabet Ney*, 31)

It was while she was in Hanover that Friedrich Kaulbach painted a full-length picture of her that hangs now in the Museum at Hanover. It shows her standing by the King's bust, a handsome figure but thought by some a little stiff. Dr. Montgomery called it idealized and untrue. Elisabet herself was proud of it and always praised it.

Much better than the bust of the King of Hanover was one she made of Schopenhauer the philosopher. She got the commission herself, going in person to Frankfort on the Main and asking for the privilege. Mueller-Muenster gives an amusing picture of the proceeding. The old pessimist and woman-hater, after an initial rebuff, was quite won over by the charming artist and nearly fell in love with her. He speaks of her admiringly in sundry letters and describes her as very pretty, very talented, an indescribably lovely woman. Always a careful worker she took special pains with the bust of Schopenhauer, spending almost four weeks on it. She took lodging above his so as to be near him, drank coffee with him, took walks with him, discussed all manner of topics with him. She wanted to make a cast of his head, but this he would not allow. He did, however, have two photographs taken for her use and in order to get a pleasant expression

drank a whole bottle of wine. Undoubtedly she took all possible measurements of his head. The outcome was certainly admirable. Schopenhauer himself liked the bust, the public were enthusiastic, even the critics approved.

An incident related of Miss Ney's association with Schopenhauer perhaps throws some light on her attitude to the other sex and her determination to be always Miss Ney. Absorbed one day in her work she glanced up to find Schopenhauer looking at her with an amused expression. "Why are you looking at me so intently?" she asked. "I declare," he replied, "I believe I can detect a bit of moustache on your lip. I find it almost impossible to believe that you are not a man." Indeed, despite her beauty and charm she was not much moved by the admiration of men. She had given her heart to Edmund Montgomery and to her work, and she had no place for anything else.

Nor was this all that was unfeminine about her. As Mueller-Muenster says, Schopenhauer completed what Montgomery had begun. She had broken away entirely from the religious ideals of her youth. She was coming more and more to a view of life and morals that was a mixture of idealism, materialism, and radicalism. In another woman it would have been downright reprehensible, but her real purity and the principles which she had brought over from her mother and childhood held it in check.

The years 1860-1863 she spent in Muenster with her people busily at work, constantly more admired for her beauty and honored for her achievement. The most important of her commissions was to model four statues of Westphalian worthies for a new public building. She completed the models with acclaim but for some reason they were never put into a nobler material than plaster.

Next for two years she traveled. First she studied art treasures of England, France, and Spain. Then, after a visit to Madeira, whither Dr. Montgomery had gone on account of his health, she went to Egypt, Greece, and Italy. In 1865 she returned to Germany. Then suddenly she went back to Madeira. Here Dr. Montgomery was now engaged in practice, mainly among English visitors. Both he and Miss Ney were by this time too well-known to remain in Madeira without being married. He told her flatly that she must marry him or leave by the next steamer. She refused. She had never had, did not now have, any thought of marriage. Marriage was a subjection of women. Marriage was stupid. This time Dr. Montgomery's will was stronger than hers and on the 10th of September, 1865, they were married in the British Consulate. But she would not live in his house, she would not acknowledge him as husband. Many people declared that they had never been married at all. Nevertheless Dr. Montgomery fitted up a studio for her in Madeira. She could not live without that. And some of her best work came out of it.

Presently it appeared advisable for the newly wedded couple to leave Madeira, and they went to Rome. Here Miss Ney had the audacity to ask to make a bust of the pope, only to meet with refusal. Espousing the cause of Italian freedom, they went to Capri to visit Garibaldi and a fine bust of the great patriot was the outcome.

They then journeyed to the Tyrol and there was modelled her most ambitious work, Prometheus Bound. Much more important to their future welfare was the discovery of Crescentia Simath, called Cencie, a capable Tyrolese woman who lived with them forty-five years to the end of their lives, a

veritable angel of good sense and devotion, far more a friend than a servant.

Finally they came back to Munich, Dr. Montgomery to pursue his scientific researches, Miss Ney to renew her artistic work. Again Dr. Montgomery provided her with a suitable studio and commisions were not long in coming. Among them was a bust of Bismarck, several statues for the Polytechnicum, then building, and finally a statue of the King of Bavaria, Ludwig II, the patron of Wagner. For the making of this statue the king assigned Miss Ney a great room in the palace. She took so much time to study his romantic, weak character that he lost patience and sharply commanded her to begin work. She refused to be hurried and the king gave way. Eventually he was fascinated and sought to give her handsome presents, but she would accept only flowers. The statue representing the king as a Knight of the order of St. Hubert still holds an honorable place in the palace of Herrenchiemsee.

Even the king's favor could not still the gossip about the relations of Miss Ney and Dr. Montgomery and the situation presently became impossible. They decided to join some friends in an enterprise to establish an ideal community in the new world (the details are far from clear) and settled near Thomasville, Georgia, early in 1871. The scheme was a dismal failure but to go back to Germany was not to be thought of. It seemed better to make a new start in more fertile and healthier Texas. Dr. Montgomery still had money and they bought Liendo, the famous Groce plantation, near Hempstead, under whose beautiful oaks we are now gathered. Here they tried to farm but grew poorer every year. Here, as in Thomasville, Georgia, they sought to ele-

vate the negroes around them, but they did not know negro nature and the negroes only plundered them.

Dr. Montgomery kept up his scientific studies, but Miss Ney practically abandoned her art. She had found a new life in her two children. Alas, one died and the other, hearing the talk of the neighbors about the free love and curious ways of his mother, became hopelessly estranged from her. In the end the plantation became unbearable. Dr. Montgomery could not leave it, but Miss Ney betook herself to Austin and built a modest but picturesque studio, Formosa, there to renew her art life through the perpetuation in sculpture of the leading men of Texas. It was difficult to secure recognition, for Texans then knew little and cared less about art. Anyway, who had ever heard of a woman sculptor? And how could a woman who had live on a farm some twenty years doing nothing but raise children, and that badly, claim to be a first-class artist? Nevertheless, she lived to see herself acknowledged as a sculptor of high rank and her studio a salon frequented by the intellectual people of the State.

Among her friends was Mrs. Thomas F. Taylor, who entered with enthusiasm into the effort to secure for Miss Ney the position to which her artistic powers entitled her, regardless of the ill-natured and irresponsible talk that her continued reticence about her connection with Dr. Montgomery made inevitable. Mrs. Taylor was never weary of writing and instigating articles for the press, and finally wrote the book, *Elisabet Ney, Sculptor*. Better than that, her sympathy was an unfailing comfort in the twilight of Miss Ney's last years. Miss Ney had defied convention her whole life long; she had thrown over religion; she had trampled on her feminine instincts; she had made a god of her art. But at the last, despite her own personal triumph, the slow progress of her

plans for art in Texas and the ruin of her hopes for her children made life seem but a hollow mockery. "Happy, happy! who is happy?" she exclaimed one day in a rare burst of feeling. When serious illness came, she could not resist and died June 29, 1907, at the age of 74. Her life was a tragedy. And yet it was not in vain. She gave the first great impulse to art in Texas and today people from everywhere visit her studio as a shrine.

As a sculptor Miss Ney was first of all thorough in her workmanship. Trained in the conscientious methods of nineteenth century Germany, she insisted on knowing her subject well before even beginning her work, and no effort was spared toward the embodiment of her conception. However she might feel about social conventions, in her art conscience was supreme. There was in her nothing careless, nothing impressionistic. She would have been horrified at the slapdash methods now so popular. Yet with her love of truth in the outward form, there is no lack of feeling. Her best portrait heads are strangely full of life. In her full length figures there is a certain lack of strength. Animal sculpture she seldom attempted, but a figure of her father's dog, Tyras, done when she was about nineteen makes us wish she had done more of it. Ideal subjects are more numerous. Some are of great beauty. Perhaps the best is Sursum, a group of two nude children, one leading the other and pointing upward, a really charming work. Probably her last work, though a subject long contemplated, was Lady Macbeth in the Sleep-Walking Scene, which is now exhibited in the National Museum in Washington but ought to be in Texas. Here we have a most impressive figure with anguish in every line, yet still a Queen.

The best known of Miss Ney's works are, of course, her

Sam Houston and Stephen F. Austin in the Capitol at Austin and in the Statuary Hall Collection in the Capitol at Washington. The Austin is very satisfying—a man of intellect, vision, determination. The Houston is less successful. It fails to reveal Houston's rugged strength. Better than either is the statue of Albert Sidney Johnston in the State Cemetery at Austin. Of this, let Lorado Taft speak, for he was himself one of America's leading sculptors and a discriminating critic as well. In his *History of American Sculpture* he says:

"[It] shows the dead General lying upon the litter on which he was carried from the field; the flag of the Confederacy is thrown over the body and falls to the ground on either side. The conception is vivid; the touch of realism of the rude bier localizes and accentuates the drama, while the use of the simple drapery gives grace and above all, sculptural unity— the face and hands being evolved as it were from a simple monumental mass. This is work of a high order."

President Potts: Mrs. Karle Wilson Baker will now read a poem, "Elisabet Ney."

Mrs. Baker: The poem I am about to read was written for this occasion—only, I didn't know it then, for that was at least fifteen years ago. The unique story of Elisabet Ney and Dr. Montgomery had fascinated me, and for some years I seized every opportunity and followed every clue that promised any light on their history and personalities. But I never knew Miss Ney; and therefore beg the indulgence of those in my audience who are far more deeply versed in the subject than I. The poem is an imaginary portrait, and makes no other claim to authenticity. It is the penalty of greatness

to be interpreted and re-interpreted by all who come within range of its magnetism.

I should like, however, to recall a few of the facts that make the poem intelligible. Mrs. Taylor, the biographer of Miss Ney, says of Liendo, "The setting up of this home marked for Elisabet Ney an entirely new phase of her life. The break with her brilliant past was complete. A totally new interest engrossed her. . . .At the time of their coming to Liendo, their elder child. . . .was a year and a half old; the other, Lorne, was an infant of less than three months. The coming of her children filled Elisabet Ney with a hitherto undreamed-of enthusiasm. She forgot her art; she forgot her overwhelming ambition and pride—or, rather, she transferred all that ambition and pride to her children. . . .Her children were to be the instruments through which she and Dr. Montgomery were to secure the immortalization of their humanitarian ideas. . . . Many years later, in Austin, someone expressed amazement that an artist with such a record of success behind her could have so completely given up the pursuit of art for all those years. 'I was busy with a more important art,' she replied, 'the art of moulding flesh and blood.' "

In the 1870's, people still believed in "moulding" children. Elisabet Ney, a passionate champion of the Emancipation of Women, had never dreamed of that Emancipation of the Child, which, happily or unhappily, has come to pass in our time. But it is doubtful if she could have acted differently in any time or place. That she had no comprehension of, and little patience with, ordinary human nature was a penalty exacted by her own uncommonness. Moreover, her faith in her own ideals was so complete that she could not believe that anybody else could be blind to them. The rebel could

not understand the rebellion of her son, nor the inflexible will another will's inflexibility.

During the first summer at Liendo, the older baby (he was hardly two) died. Henceforth all the mother's hopes and dreams were centered on the little Lorne. But she did not succeed in "moulding" him. By the time he was twelve—a beautiful, spirited boy—he was in open rebellion against his mother; and the estrangement was never healed.

"Cencie," originally a housekeeper, became as the years passed the business manager, familiar friend, and, finally, a sort of homely guardian angel of the two idealists. She became also the mediator beween them and Lorne, over whom she alone, his old nurse, retained influence.

The "Woman-statue" is the study of Lady Macbeth finished when Miss Ney was nearly seventy. The portrait-bust of Lorne, made when he was fifteen, she always referred to simply as "the head of a young violinist."

"The Doctor," of course, refers to her husband. During her last illness he came up from Liendo to be with her constantly.

Miss Ney's letters show that her speech was the quaintly beautiful English of the cultivated foreigner; but I have made no attempt to reproduce this, lest the mere idiom prove distracting. I have tried only to reflect the quality of her mind and the temper of her spirit, as they might have shown themselves to Cencie in her last illness, in the atmosphere of a life-long intimacy.

ELISABET NEY

KARLE WILSON BAKER

Now, Cencie, turn my chair a little, please,
So I can see the bed. Thank you, my dear.
It looks as downy as a sea-gull's breast.
If I could only lie there, and stretch out,
And take two full, good breaths—then I'd have strength
To gasp another week, here in this chair.
Never mind, Cencie: just to look at it
When you have plumped it up so smooth and soft,
That helps—just looking. Nobody but you
Could make a bed look like a warm snowdrift
Except my mother . . . Seventy years ago . . .
Cencie. . .When did the Doctor hear from Lorne?

Ah—! Never mind: I didn't think he had.
Now don't you cry—and don't you smile so, either.
Ah, Cencie! That's the saddest thing you do,
That smile you make, to try to make me smile.
Why, I can bear it! Don't you know I can,
After you've watched me fight for forty years?
I can bear anything! Of course, it's hard,
Having to sit up this way, day and night,
And only *looking* at the bed, for rest.
The strange thing is, that every time I look
I think about my mother. Seventy years,
And half a world away—but years and miles
Are nothing. Not the deadly things. Has Lorne
Written *you*, Cencie?

But he does, sometimes,
You know; for you don't anger him, you see,
As I do, and his father. Do you remember,
Cencie—he was the gentlest little boy?
Adorable! And quick and soft and sweet—
He was like that till he was nearly ten.
One thing I've never told you, all these years. . .
About the very first. . . That neighbor child—
What was the name of those barbarians?—
Had come to play with Lorne. I called him in
For lessons, sent the other child away.
Stretched out my arm to draw him to my side. . .
He edged away, and stood and looked at me.
The first time—as he always looks, always
Has looked, through all these years—always—always.
I drew the secret out. "He said your clothes
Are *funny*. And he said you were not *good*."

No, Cencie, not a saint— I am no saint.
Besides, I must have blundered . . . desperately.
Yet—born crusader for all nobleness,
Kin to all splendors, of all stupid sloth
And baseness, the inveterate enemy,
Faithful in breath and bone—I *have* been "good". . . . .

I would not wince. I coaxed him to my knee,
That little soft boy with the judging eyes,
And tried to choose what he would understand.
"My son, your mother is an artist—proven,
Acknowledged by the great! Across the seas,
In old lands where men love the beautiful,
Your mother made the statue of a king!

And all the beauty that she gathered, then,
And all the joy, and all the pride and power,
She's kept for you. She makes no statues, now,
She's making *you*. Out of your priceless self,
My little son, she'll make a greater thing
Than any kingly image!" Never once
Did his eyes change. . . So it has been. . . You know.

I think I know now why he took no pride
In those old triumphs, won across the seas,
All hearsay, finished before he was born.
But when his father made me let him go,
And sent him off to school, and I took up
My work again, and fairly made men love
These cold, immortal children of my soul,
Even here, in this stubborn wilderness—
I hoped, through fight and famine, night and day,
Then when he heard the people that he *knew*
Acclaim me artist: when he saw the best
In all his little world upholding me,
Until, at last, at last, my statues stood
There in the capitol: I hoped he'd see.

No, Cencie; do not tempt me from the truth.
For seventy years, now, I have faced the truth
Whenever I could see it. I have seen.
I am not hoping that—not any more.
I only hoped he'd come—just that he'd come.
My mother—when the Bishop tried to move me,
To shake my young resolve to go away
To study, I remember how he begged,
"You owe your mother—" "She would die for you". . . .

She was a wall to climb. "Die" was—a word.

See how my statues glimmer in the dusk,
Cencie! These rugged, faithful friends of mine—
Roberts, and Reagan, and the good kind Sayers:
Lorne in the corner there, my beautiful!
There is a likeness, Cencie! It would speak,
I half believe, if *you* would ask it to.

Turn me away a little; for a while
I will not look at it. Then it will seem
When I turn back, as if he'd really come.
Yes, you may go now, and warm up my broth:
My woman-statue will be company.
She'll stay with me; I'll watch her while you're gone.
Poor thing! She was so strong: she wanted Power.
She's paid for it. . .And she had children, too.

The reading of Mrs. Baker's poem concluded the Liendo Meeting of the Society.

The Centennial Banquet

THE Centennial Banquet of the Society was held in the Rice Hotel in Houston. On this spot once stood the capitol of the Republic, in which, on December 5, 1837, the organization of the original Society took place. Dean C. S. Potts, president of the Society, presided. Members present at the Banquet included Mrs. Baker, and Messrs. Randall, Wharton, Chandler, Hutcheson, George A. Hill, Jr., Weiser, Lovett, Schoffelmayer, Battle, G. B. Dealey, Wrather, Geiser, Stephens, and Rhea. Guests of the Society included Mrs. I. K. Stephens, Mrs. W. A. Rhea, Mrs. S. W. Geiser, Mrs. C. S. Potts, Mrs. W. E. Wrather, Professor H. A. Wilson, Miss Ann Prescott Toomey, Mrs. Harry B. Weiser, Miss Nina J. Cullinan, Mrs. George A. Hill, Jr., Mrs. A. C. Chandler, Miss Beulah Bowling, Mr. George D. Sears, and Mr. M. L. Foster.

Following the dinner, came an introduction of visitors. President Potts then introduced Mr. Victor Humbert Schoffelmayer, who delivered an address on "Texas at the End of a Century."

TEXAS AT THE END OF A CENTURY

VICTOR H. SCHOFFELMAYER

AT THE end of a century of sustained economic progress Texas finds itself firmly intrenched as the Nation's leading producer of raw materials but disturbed by rapidly changing world conditions which may be expected to affect her future seriously.

The comparative security from competition which Texas enjoyed during many years in which it built up a virtual monopoly for a wide variety of products exported to the markets of the world, began to wane with the start of the depression. It has since gained momentum because of a combination of factors not the least of which is economic nationalism.

The writer keenly recognizes that a philosophical appraisal of Texas and her institutions properly must embrace a historical analysis of a people and forces which helped to shape an empire comprising one of the Nation's largest physiographic units. It is impossible to compress such a review into the confines of this paper. The political, social and economic factors which account for Texas as it exists today can only receive sketchy treatment. The fact stands out that Texas is fortunate in its comparatively late settlement and development which made possible the fusion of modern and older concepts contributed by various regions.

Texas' development during the past one-hundred years, commemorated last year by the State in a great Centennial Celebration, which attracted millions of people from near and afar, has been perhaps too largely agricultural. Due to advantages of favorable climate, soils, geological structures

and geographic location, Texas has become the foremost producer of cotton, cattle, wool, mohair, and in recent years, of petroleum, sulphur and lesser mineral products. Proximity to the Gulf of Mexico made Texas a great cotton export state. For a century the drift has been in the direction of exploitation of raw materials so generously supplied by Nature. In the same time other and older regions based their economy upon manufactures. A glance at the map should convince the student of regional planning that Texas in the next one-hundred years is destined to play an important part in the development of manufacturing industries to which its raw materials are adapted. That development will enable Texas to balance its agriculture and livestock economy. The result should be a well rounded system that will bring a greater measure of prosperity to the region and overcome some of the present handicaps which have been permitted to develop through inaction.

Situated almost midway between the Atlantic and Pacific oceans with a frontage of 600 miles on the Gulf of Mexico, the gateway to Latin America and the older markets of the world, no longer outside the lines of travel from East to West not only by rail but by excellent highways, Texas, with its 265,000 square miles, constitutes a geographic unit almost as large as Germany and England together, producing products with a combined value of more than two billion dollars annually.

Texas lies at the crossroads of three great continent-building forces where older and newer geological forms are freely intermingled. The fullest scientific study should be devoted to this geological wonderland that combines Appalachian, with Pacific Coast, Rocky Mountain and Mexican earthbuilding forces in a complicated pattern.

Similarly Texas is at the crossroads of Eastern, Western, Northern and Southern life zones and plant and animal forms. In the Big Bend Region there mingle Canadian and Pacific Coast types of trees and lesser plants, along with desert flora that has pushed its way northward from the high Mexican Plateau of Chihuahua and Coahuila. In the Texas High Plains, eastern and western grasses mingle along a median line that traverses the Edwards Plateau. No other State boasts of such wealth of plant forms. The student of plants and animals realizes that such combinations are of definite use to the breeder of new forms of life.

Texas, with its 6,125,000 inhabitants, occupies a highly favored region which deserves closer study. Of its 168,000,000 acres only some 20,000,000 are in cultivation and at no time were more than 32,000,000 acres under plow. By comparison it may be interesting to cite Italy's 30,000,000 acres from which the sustenance to feed 43,000,000 people is largely obtained by intensive tillage. No man can foresee to what use will be put those vast areas of Texas now designated as grass land, mountains, desert or near desert in a time when the science of agriculture has reached its highest degree of development and new mechanical apparatus and farming practices might easily transform unproductive land into productive assets. The possibilities of using now unproductive land are staggering in the light of recent discoveries and steadily spreading practices.

I

The historical perspective of Texas accounts in large measure for the State's present economy. That this economy is too one-sided must be admitted by students of the problem. No nation or state can attain its full development without

taking into consideration all those factors which can be made to contribute to a logical development of its natural resources—soils and their productivity, climate, forest, mineral wealth, streams and seacoast, markets at home and abroad, transportation facilities, financial agencies and lastly but equally as important, cultural facilities. It is through the latter that a people can be aroused to recognize their destiny, to use their resources logically and wisely, to make harmonious and consistent progress at a cost which will not be prohibitive.

Examination of Texas history leads to the inevitable conclusion that the development of the State really began with the penetration of Anglo-American settlers from the Eastern United States who in their westward thrust reached the broad expanse of Texas at a considerably later day than the Midwest and West.

The development which has taken place on the Texas prairies and plains is the direct result of the type of penetration peculiar to the Anglo-Saxon and peoples of German, Bohemian, Norwegian and other stock, who conquered the Southwest. They came to till the land, to conquer the wilderness, to build homes, to establish villages, towns and cities, to found a civilization which would embrace their traditions and culture.

This type of penetration was in striking contrast to the conquest of early Spanish invaders who had come to the New World to find gold and silver, and spices needed in their diet to stabilize meats and other perishable foods in a hot climate before refrigeration had been discovered. Spanish conquistadores in spite of three-hundred years of occupation or claim to Texas territory have left their impress

upon customs and manners only in a comparatively narrow fringe adjacent to the Rio Grande.

That stream rightly marks the boundary of Latin-Indian and Anglo-American civilization with all its implications. The travels and exploits of Cabeza de Vaca, of Coronado, of De Soto's followers, of the early missionaries who accompanied these heroic sons of Spain, make marvelous reading but they did not give permanent character to the State's culture. Spanish influence as exerted upon Texas, as a whole, was transitory. Similarly Mexican influence has left only fragmentary and local effect upon population and customs, enriching, however, border areas and former administrative centers with a distinctive cultural tone. From El Paso on the West to Brownsville on the Southeast there persists a border type of Spanish-Indian influence which adds much charm to a region peculiarly adapted to its continuance.

Texas is the only State in the Nation over which have flown six separate flags: French, Spanish, Mexican, Republic of Texas, Confederate and that of the United States. But one seeks in vain for vestiges of French influence. Aside from a conjectured point on the Texas coast near Port Lavaca, where La Salle was swept by stormy weather and the meagre remnants of an old fort on Red River nothing remains of French penetration.

In striking contrast to Spanish efforts of three centuries, consisting in the main of nomadic quests for the mythical Seven Cities of Cibola studded with gold or the Gran Quivira, which left only a few scattered Indian villages under the influence of the Padres who taught the savages Christianity, the efforts of the Anglo-Americans from the first assumed a character of permanent settlement. Conquest of the land, not of the Indians, became the compelling force

of the Anglo-American intruders into the Texas valleys and prairies. These settlers had come to stay. Agricultural and stock-raising pursuits formed the basis of the pioneers' struggles. They had found what they had sought, rich land in a mild, healthful climate.

There is another important historic phase to the settlement of Texas. At the same time that France and Spain, and later Mexico, struggled for the possession of the Texas region there rose on the East the spectre of a vigorous young Republic of the United States steadily pushing westward. This westward penetration was greatly stimulated by the sale in 1803 to the United States by France of what is known as the Louisiana Purchase, a vast uncharted region. There developed a conflict of interests between Spain and the rapidly growing United States. It was only a question of time as to the final decision. Texas happened to play a critical part in this conflict. The war with Mexico, whatever may have been all its causes, established the United States as the great power on the North American continent and held Spanish influence to the border that starts in Texas, traverses New Mexico and Arizona and ends in Southern California.

II

It is after the coming of the first Anglo-Americans about 1820 that permanent settlement and development of Texas in a progressive and stable manner began. Moses Austin left his Missouri home in 1820 and came to San Antonio to establish in Texas a colony of settlers from the United States. Successful in obtaining a permit from the viceroy of Mexico, the elder Austin died on his return trip to Missouri but his request, that his son Stephen F. Austin, carry on his project, was promptly followed. The obstacles which Stephen F.

Austin encountered before he settled his first 300 families on his grant along the Brazos river in Central Texas can not be recounted in this paper. The historic fact remains that from this effort the permanent settlement of Texas and its subsequent progressive development must date. The founding of the village and governmental center of San Felipe de Austin is as significant in the history of the Southwest as that of Jamestown and Plymouth in that of the Eastern United States.

It would be impossible in a limited paper to narrate the steady growth of Texas from the historic beginnings under the guidance of Stephen F. Austin until the present time. The fight for Texas independence against Mexico might be traced to that inherent fundamental difference in the character of two peoples, the one just emerged from a long struggle for its own independence against Spain which in part contributed to faults of administration of the province of Texas which were irksome to Anglo-Americans. The Mexican history of the period reveals a series of revolutions that greatly interfered with a stable administration of states or provinces far removed from the center of Government in Mexico City. A great wilderness lay between the capital and Texas and communication was difficult and slow. The commerce of Texas in those days trended more easily towards the United States, from which its new settlers were coming in great numbers, attracted by stories of fertile, cheap land. Mexican colonial policy was largely a continuation of that of Spain. Although Stephen F. Austin acted in good faith throughout in the matter of establishing his colony in the Republic of Mexico, marked discontent developed on the part of many settlers which ultimately led to decisive measures.

The efforts of Hayden Edwards at Nacogdoches to establish the Republic of Fredonia and the subsequent enactment of legislation by the Mexican Congress to prevent further settlement of families from the United States, excepting under conditions distasteful to the settlers, such as levying duties on all foreign imports, later were followed by denial of colonists' rights to trial by jury and right of bail. Finally the inevitable conflict between a Protestant people and those determined to enforce the Roman Catholic as a State religion, successively led to embittered feeling that brought revolution.

With the declaration of independence at Washington-on-the-Brazos on March 1, 1836, began a new period for Texas which ended only with the war beween the United States and Mexico. Texans, records show, from the setting up of an independent republic, leaned strongly to annexation to the United States which became a fact in 1845. The Texas Republic lacked sufficient population and capital to carry on economically and from a historical point of view annexation to the United States, from which its Anglo-American settlers had come, was logical. In 1845 Texas became part of the United States. From that time its stable development was assured.

In the westward trek of Americans towards the prairies and plains and ultimately to the Pacific Coast the main trails led far to the north of Texas. Settlement of Missouri, Iowa, Nebraska, Colorado, California, Oregon and Washington was a logical procedure ultimately given enormous impetus by the building of transcontinental railways. The Texas settlements were largely founded near the Gulf Coast or not far inland along the rivers which led northwestward.

Settlers were mostly from Tennessee, Alabama, Georgia,

South Carolina, Missouri. In the early designation of the people of Texas as "Texians" is to be found the ending of "ians" as it occurs in Alabamians, Missourians, South Carolinians or Tennesseans. These people brought with them their knowledge of American agriculture, their plows and other implements, their culture developed during the previous century on the slow westward movement from the Atlantic seaboard. Land to these people was a prime asset. The forest supplied meat and fuel but the level prairie and the open river bottoms were a challenge to raise crops. Whereas Spanish conquerors in the New World were concerned with imposing upon the savage their own religion and civilization the settlers of the Southwestern region drove the Indians before them to make way for tilling the fertile land. They had no interest in Christianizing the aborigines. Their attitude towards the region which they entered was to establish permanent homes.

The crucial period, when the Texas problem is looked at nationally, came with the declaration of independence by Texas patriots. Was Texas to remain an independent nation? It is interesting to reflect upon this possibility in these uncertain times. One wonders whether an entirely different economy would not have been set up by which Texas probably would have been a strong and successful competitor with the Old South for the cotton markets of the world. Such competition might have delayed indefinitely the foreign expansion of cotton culture. Perhaps the development of the cattle industry would have maintained for Texas world markets. Who knows?

Although the material progress of Texas during the past century has been noteworthy, that of the educational and spiritual values has not been permitted to lag. Along with the

building of great cities in the interior and at the ports, and a network of some 17,000 miles of railroads and 22,000 miles of highways, the people of Texas have spent untold sums on the construction of public and private libraries, church edifices, colleges and universities, art museums and other cultural assets. Nor have sports been neglected in a region which may well boast of being a land of almost perpetual sunshine and a climate conductive to outdoor activities during the entire year.

III

A notable characteristic of Texas people has been their emphasis upon free education. The Anglo-American settlers who founded the Republic of Texas saw to it that needful provisions were made which would insure public free schools. In the time of President Mirabeau B. Lamar the foundations were laid, which from first to last, have resulted in the allocation of some 47,000,000 acres of land, one-fourth of the Texas total area, to the State's school fund. This wise provision has placed an accumulated permanent fund of more than $70,000,000 at the disposal of the State Department of Education.

It is well to point out that although Texas pioneers necessarily were confronted with many problems of which the acquisition of land and goods and the establishment of permanent homes were not the least important, they nevertheless at any time did not permit their interest in these things to interfere with farsighted educational plans. Not only public schools but higher education received their attention. The Texas Constitution provided that there be established a State University which might rank with the best.

While by some standards of measurement Texas educa-

tional facilities have been rated as thirty-second among the States, nevertheless from the standpoint of actual state support Texas ranks high. There has been steady increase in the Texas per capita apportionment for scholastic enrollment. The meagre figure of $1.47 in 1876 rose to $4.25 in 1900, to $8.50 in 1920 and $19 during this year. Last year the State spent on public school education $37,073,234. For higher education Texas annually spends some $6,000,000. When it is realized that Texas occupies an area equal to several Eastern States, and that it is thinly populated as a whole, involving costly expenditures of funds along other than purely educational lines, the showing must be considered as commendable. What seems desirable is a better integration of all phases of the Texas educational program from public schools to colleges and universities.

With the gradual attainment of the higher living standard and comforts of life, Texas in the last two decades has become articulate in the field of literary expression. Works by Texas authors, histories, biographies, folklore, fiction and poetry, bearing the imprint of major publishing houses of the Nation have issued in perhaps greater volume than the preceding half century recorded. More than a few of these books have been of distinguished merit and their permanent worth has been conceded by discriminating critics in this country and overseas. Citations of the finer books and their authors can not be indulged here. In literary achievement Texas has come of age. The better writers in Texas, and the number of such is now impressive, may be depended upon in the next ten years to make even more important contributions to contemporary American literature.

* * * * *

IV

THE NEXT ONE-HUNDRED YEARS

Great as has been the progress of Texas during the century just ended, there are many indications that the next one-hundred years will surpass what has gone before. Texas is certain to accelerate its stride as the result of inherent advantages and past experience which will be made to work together towards new goals.

Just as the past development of the State has been characterized largely by the growth of agriculture and stock raising the next century will concern itself with industry and manufacture. That does not imply that agriculture and livestock necessarily will fall into a decay. On the contrary they can be greatly aided by wise planning which will encourage needed industries based upon the logical use of the products of farm, ranch, orchard and forest. The greatest need it seems, is for well integrated state-wide planning which takes into full consideration the play of all the forces which give Texas its definite character.

This calls for a basic understanding of Texas physiographic features, of Texas geography as it affects geologic structures, plant and animal life, wise utilization of land and a re-evaluation of the entire Texas economy in terms of the times in which we live as well as in terms of a rapidly changing world. Texas planning must be studied in the light of its varied natural regions and their relation to each other as well as to adjacent areas. As Elmer H. Johnson, economic geographer of the University of Texas, states, "in no other State is geography more important or more basic to an understanding of the State's future." In the past century Texas has been concerned largely with historical geography. The future

will require a greater knowledge of economic geography, the result of scientific analysis and interpretation of the State's resources.

The time is here for a realignment of all factors which bear upon the commerce of Texas whether at home or abroad. Economic forces set loose by the World War have reshaped international relations and embody a challenge for a broader approach to national and state planning.

Texas, in spite of its splendid geographic location on the Gulf of Mexico, can not escape from the effects of curtailed world trade of the United States as a whole. Disrupted channels of commerce due to steadily growing nationalism abroad, debased currencies and lack of gold with which to purchase American goods, growth of barter for such Nations as Germany and Italy in order to obtain raw supplies from countries needing manufactured articles, and last, but not least, high tariff policies, have played havoc with Texas raw materials, notably cotton.

The loss in the past four years of approximately $420, 000, 000 worth of outlets for the principal Texas crop may be traced to the steady and alarming expansion of cotton culture in the competing nations from India and Egypt to Brazil, Russia, Argentina, Persia, Turkey and Uganda. The annual export of some 4,000,000 bales of cotton from Texas ports has been reduced to approximately one-half the former total.

Similarly Texas has largely lost foreign markets for its surplus wheat, cattle, lumber and grain sorghums. The marvelous efficiency of foreign agriculture stimulated by the direct economic and social necessity in history, is likely to result in continued and possibly permanent loss for a considerable portion of Texas surplus farm products. Texas

manufacturers, along with those of other states, have supplied competing nations with gins and other necessary equipment which are not likely to be junked merely to restore Texas foreign trade.

It is therefore, of prime importance for Texas people, as a whole, to look soberly at their problem and adapt themselves to steadily changing world conditions.

Agricultural retrenchment from a surplus economy to one measured in terms of the domestic market necessitates far-reaching readjustments. In order to supply the deficiency of the Texas agricultural gross income our farmers might be tempted to compete with the Corn Belt and the Middle West in the production of basic food products in which those areas have a virtual monopoly. Texas' climate and soils as well as geographic location imply a real threat which must be taken into consideration in agricultural planning for the Nation as a whole. Texas grass, corn, grain sorghums and cotton concentrates may easily, if forced, bring perilous competition to old established producers of beef, pork and dairy products. Restoration of a substantial portion of lost cotton markets would be likely to prevent this unfortunate competition.

But in spite of this period of unrest which characterizes rural America at the present time and which has manifested itself to a large degree in Texas, it is logical to assume that a solution will be found in a closer union between agriculture and industry which will assure producers on the farm enlarged markets at home.

V

Texas is marvelously equipped for mass production of raw materials. Its vast, level prairies and plains, whose fertility can be restored and maintained by proper farming methods,

are admirably adapted to mechanized farming of a kind not to be found elsewhere except in limited areas. Low cost production of cotton, wheat and other grains, sweet potatoes and other sources of sugar and starch, of cattle, sheep and goats and their products, of pines and hardwood, of petroleum and natural gas, lignite and other cheap fuels, give Texas an advantage over higher-cost States which alone should attract industries. Texas, therefore, ideally fits into a program of steadily increasing domestic manufactures based upon agricultural raw materials.

One of the phenomena of the depression is the expansion of the chemical industry of the United States. There have come into existence almost overnight products which were scarcely hinted at twenty years ago, products which represent chemical and physical recombinations of such agricultural raw materials as cellulose, protein, casein, starch, resins, which may change the industrial outlook of the United States and of the world. Chemical progress has been sensational, its future may set undreamed of records.

The raw materials consumed by this new industry last year reached a total of $100,000,000, its output three times that sum. Cellulose and resins from pine and hardwood forests, alcohol and acetic acid from sugar cane and other crops, protein from soybean and cottonseed, solvents from crop wastes, casein from milk and other derivatives eagerly sought by industries, all offer the Texas farmer an opportunity to recover lost income and to lay the foundations of interrelated basic industries which will give new impetus to the development of Texas in the field of manufacture in keeping with the demans of a changing world.

The encouragement to produce farm raw materials for industrial use may be properly termed the Farm Chemurgic

Movement. which had its beginnings at Dearborn, Mich., three years ago when scientists, industrialists and agriculturists from all parts of the Nation laid plans for their future cooperation. The plan briefly calls for mobilizing science through research in the cause of agriculture. Through properly supervised research crop and animal product surpluses will go to feed a whole series of new rapidly expanding industries, which at present import enormous quantities of vegetable raw materials from Asia, Africa, the South Seas, Europe and other parts of the world. Since the bulk of these products could be produced in our own country the matter assumes importance in a time of diminishing foreign outlets for Texas products.

In short, Texas to a large degree can avail itself of this new opportunity if it acts promptly. Many states in what is known as the Deep South have acted promptly and today point to new chemurgic industries which utilize the cellulose of pine forests to make kraft paper of every variety and perhaps newsprint, attract that Northern industry to the Gulf Region, or which use the meat of the sweet potato to make starch of which the United States annually imports 300,000,000 pounds, or which recover turpentine, rosin and pine oil from millions of acres of cut-over land pine stumps.

If Texas had remained a Republic it is not unlikely that as a Nation it would have been among the first in the production and exports of such commodities as cotton, cattle, hides, wool, mohair, lumber, sulphur, gypsum, lime, petroleum and other important raw materials. The Republic would not have had to conform to a national policy of restricted crop or livestock production. She could have expanded, as other nations have done, at the expense of the rest of the South and of the United States.

As an integral part of the United States, Texas, however, must adjust its problems in keeping with national and world requirements, with tariffs and lost markets abroad, with foreign competition and increasing economic nationalism. She must find ways to restore her shrinking farm income, perhaps by balancing agriculture and stock raising with industries based thereon. Texas may well develop industries to meet an expanding market in the Southwest and Mid-West, a region of 22,000,000 population right at its doors.

Texas people are in need of greater knowledge of the field of chemical research which is revolutionizing industry in the United States and the world at present. The East and North are centers of vast chemical and attendant industries which need not necessarily be confined to those regions in the coming years. Decentralization of industry already is on the way. In recent years some $300,000,000 have been invested in chemical and related industries in the Old South and only a minor portion in Texas. The trend of the chemical industry is to come South because of the wide range of raw materials awaiting development, the lower production cost, the homogeneous supply of Anglo-American labor, the advantages of mild climate and improved housing and general living conditions.

America's chemical industries are the most rapidly growing of all industrial enterprises. No man can foretell the future. Many scientists assert that the day is not far away when such basic materials as lumber, or iron and steel will give way to improved materials such as plastics made largely from cellulose, water, air, limestone, petroleum, sulphur, salt and coal. The building materials of tomorrow may be plastics. The field is so vast that it is difficult to remain conservative. Recombination of vegetable and mineral products, such as

sawdust, fibers of cotton plants or the cellulose and lignin of trees, the proteins of legumes and other crops, the starches of sugar cane and grains, all are likely to become the raw materials of tomorrow's new industries.

The chemical processing industries of the United States last year consumed more than $4,000,000,000 worth of raw materials, of which three billions were from mines, nearly one billion from the farm and $300,000,000 from forests. This is merely the beginning of a new day for American agriculture. Why?

Because the drift logically must be in the direction of raw materials which will reproduce themselves annually, not disappear steadily as will petroleum. Cellulose, starch, protein and other industrial raw materials can be grown on the farm either as annual crops or over a period of production fitting into a supervised farming program which should be profitable and give assured outlets for raw materials consumed by industries.

In order to insure the logical destiny of Texas, the State's planners should familiarize themselves with what other states and nations are accomplishing under the stress of scarcity of raw materials and inability to import what they may require. The economic programs of Germany and Italy, of The Netherlands, of the British Isles and France, of the Soviet Union, of Finland and Poland should be made to contribute to the planning of Texas to meet the challenge of today and tomorrow.

In Germany an entirely new industrial economy is being based upon products of the forest. The lowly pine and spruce are made to yield cellulose, for the textile and paper industries, sugar and cattle feed, resins, alcohol and acetic acid, upon which a whole series of chemical industries is founded.

German scientists look upon the forest as living coal fields, containing all the products of the coal measures and many more now being discovered in the laboratory by research chemists. It must be remembered that the modern industries of England, Western Europe and the United States were largely based upon coal.

Hard-pressed European nations have found that they can produce synthetic wool from waste skim milk, as Italy is doing, thus replacing former imports of Australian and New Zealand wool. Germany and Italy are leaders in the production of artificial fibers from pines and beech serving their textile industries in place of both cotton and wool. The field of substitutes is ever widening because of research. No man knows the limit of technical discoveries in these branches of science.

In the light of these significant developments at home and abroad, the result of the research chemist and physicist and of the wide-awake industrialist seeking new cheap raw materials and markets for new products, the industrial development in Texas should steadily increase in accordance with market demand. Texas should play one of the leading rôles in this new industrial drama because of its unchallenged possibilities to produce the raw materials enumerated in the foregoing. Because Texas possesses abundant sunshine and sufficient rainfall over most of its territory, and because of the newer technique of water conservation and utilization which will increase the stability of High Plains farming to undreamed of proportions, and because of the great interest in soil conservation and restoration now manifested by farmers and landowners which must result in enhanced fertility of the land, there is every reason why Texas will be in position not only to attract new chemurgic

and related industries but to supply them in perpetuity with the raw materials they require.

In proportion to the expansion of industries Texas people will automatically enlarge their field of enterprise and opportunities for employment. Growth of industrial centers assures increasing outlet for food and other products of the farm. It may even be that a suggestion by Henry Ford will be followed to establish certain small industries in rural sections giving part time employment to farmers and thereby increasing their earning capacity. Laws governing industries should be as liberal as possible but at the same time should safeguard the resources of the state against ruthless exploitation by unscrupulous developers and industrialists. These laws should insure in perpetuity, if possible, a supply of such raw materials as forests and field crops and prolong the life of petroleum and natural gas as long as possible. Because of its climatic advantages, Texas, however, when called upon in the dim future to provide new sources of cheap fuel and power, can develop important and unexplored fields of lignite a few feet below the surface and when the day comes to produce synthetic motor fuel from crops in the form of alcohol no state will be in better position to produce that commodity.

It has well been maintained that the destiny of a people is largely determined by its environment, by natural advantages of location, soils, climate, by inheritance and traditions, by force of character and ambition.

No state, no people possess a larger share of these factors than do the people who occupy Texas. To a greater degree than perhaps elsewhere in the South has there been brought about in Texas a desirable blend of Southern, Eastern, Northern and Western cultures, experiences and influences to which

the region is heir. It is for these reasons, I believe, that the next one-hundred years will eclipse in every way the progress made during the century just closed. Life will be infinitely finer and richer. The ingenuity of Texas people, who have distinguished themselves in the one-hundred years of independence from Mexico, during which they laid the foundations of the present great State, and a greater State to come, certainly is equal to the task ahead. The future for Texas looms bright.

President Potts then introduced Professor Harold A. Wilson, F.R.S., of the Department of Physics at The Rice Institute, who read the following formal paper:

ONE HUNDRED YEARS OF NATURAL PHILOSOPHY: 1837-1937

H. A. Wilson

WHEN your president asked me to address this meeting I felt flattered but afraid that I was not qualified. Indeed it seemed that a student of philosophy and not a physicist ought to have been chosen, but then it appeared that an address on natural philosophy was desired rather than one on philosophy as such. In Scotch universities physics is called natural philosophy so, having at one time occupied the chair of natural philosophy in Glasgow University I decided that I would venture to address your society on natural philosophy. In the first place I congratulate the Texas Philosophical Society on coming to life again on its one-hundredth birthday after being dead since the age of three. That is a notable achievement in resurrection and I hope that in the future the society's lives will be longer and its deaths shorter than in the past.

Some future historian, say about the year 5000 A. D., using material dug up from the ruins of the present civilization, writing a history of science may be able to devote a paragraph or so to the years 1837-1937. He will probably say that during those years the theory of the conservation of energy and the theory of biological evolution were first put forward and that some crude ideas about the nature of matter apeared which were popular for a few decades but were then discarded.

The theory of conservation of energy was proposed by a German country doctor, Julius Robert Mayer, in 1842. He grasped the idea in all its generality and brought forward

convincing arguments in its favor in several brilliant papers. The value of his work was not recognized for a long time. He was derided by his countrymen and practically driven insane by the treatment he received. Twenty years later, Tyndall in England, lecturing before the Royal Institution, gave Mayer full credit for his great work and Mayer enjoyed a few years of fame before he died. Mayer's theory has so far stood the test of time and may be said to be the highest of all natural laws. It binds together into one whole all material phenomena, physical, chemical, biological, and cosmical.

Darwin's theory of biological evolution appeared in his great work, *The Origin of Species*, in 1859. *The Origin of Species* in biology is comparable with Newton's *Principia* in physics and Darwin's theory of evolution stands the test of time like Mayer's conservation of energy. Darwin's theory met with a lot of opposition. Disraeli said that the question was whether man was descended from monkeys or angels and for his part he was on the side of the angels. An Irishman said that no doubt the English were descended from monkeys but the Irish had ascended from them. Quite recently a well known clergyman said that he could not see why God should take a perfectly good monkey and make a rotten man out of it.

During the last fifty years the electrical nature of matter has been discovered and the quantum theory of atomic phenomena developed. The new theories were founded on the researches of a great many scientists but are properly associated with the names of a few great leaders of scientific thought such as Mayer, Joule, Faraday, Darwin, Clerk-Maxwell, Mendeleeff, Bunsen and Kirchoff, J. J. Thomson, Rutherford, and Bohr.

The material world consists of atoms and the structure of atoms has been discovered and is being studied mainly by physicists, so that the really fundamental theories and discoveries belong to physics although they are not always due to physicists, for chemists, biologists, astronomers, and other scientists often make fundamental advances. Indeed chemistry tends to become a branch of physics and biology a branch of chemistry.

During most of the nineteenth century college students referred to science as "stinks" and people who went in for "stinks" were looked down on by those who followed the popular course in ancient humanities and dead languages. Now science has come into its own, Greek has gone and Latin is quickly going. It is no longer necessary to advertise science; in fact, the pendulum has swung too far the other way and perhaps we need a little more of the humanities than we are now getting. Philosophy, which used to include all knowledge, is now what is left after all scientific information has been allocated among the newer subjects. Natural philosophy now means physics and the term only survives in Scotch universities where philosophy occupies a prominent position in academic circles. So-called philosophical societies are really scientific societies and philosophy as such is only rarely discussed at their meetings. I have been a member of the Cambridge Philosophical Society for about forty years but have never heard of a paper on philosophy being read at a meeting; and I have been a member of the American Philosophical Society for about twenty-five years and do not recall any paper on philosophy in its proceedings.

Looking back over the past hundred years of scientific activity can we see any definite change in the point of view? Are the modern methods different in any fundamental way

from those of a hundred years ago? Technique has been enormously refined, much more exact instruments are available, problems apparently impossible of solution a hundred years ago can now be attacked succesfully; but if we read, say, Faraday's experimental researches, we find his outlook and his methods fundamentally the same as those popular now. His arguments seem perfectly sound now as they did a hundred years ago and his marvelous experimental skill and scientific intuition do not suffer by comparison with those of later workers.

If any fundamental change in the scientific outlook has occurred it is in the more definite realization that the properties of matter in bulk with which we are familiar may be, and probably are, quite different from the properties of the ultimate microscopic constituents of matter such as electrons and neutrons. Particles obeying Newton's laws of motion are not now regarded as the bricks with which the universe is built. It is admitted that the properties of the ultimate particles may be different from anything with which we are familiar and so may be impossible for us to imagine. In fact, the ultimate constituents may not be particles at all. We cannot conceive things except in terms of our experience with matter as we know it. Our conceptions of the inner structure of atoms are merely crude models probably quite unlike reality. There is therefore a tendency to rely on mathematical theories which lead to formulae which fit the facts, but the real meaning of the symbols is unknown.

There is not really anything new about this situation but it is more clearly realized than hitherto. Newton two hundred and fifty years ago found mathematical formulae which agreed with astronomical observations, but the real meaning of the symbols in the formulae were unknown. We have

gravitational, electric, and magnetic fields of force and we adopt units of field strength and can measure the strength of these fields in terms of the units but we do not know what these fields are or how they differ one from another. A moving electron produces electric, magnetic, and gravitational fields in the space around it but how it does this we do not know. During the past century, attempts were made to explain the nature of such fields of force by attributing the familiar properties of matter to the ether and assuming the fields to be motions or strains in the ether. This sort of thing is not popular now and, indeed, the ether as a hypothetical material medium filling all space has been abandoned. We now regard space itself as having physical as well as geometrical properties and we say that fields of force are excited in space by material particles such as electrons and protons.

During recent years American scientists have made several fundamental contributions to science. A. H. Compton showed that when light acts on electrons the action is like a collision between two hard particles, thus showing clearly the particle nature of light, which had been thought of only as waves for more than a hundred years. Then Davisson reflected electrons from a crystal and showed that they are reflected like waves, thus showing clearly the wave nature of electrons, which had been regarded as particles ever since they were discovered by J. J. Thomson fifty years ago. Anderson discovered positive electrons or positrons fifty years after negative electrons were discovered. It is found that a particle of light or a photon of high energy can disappear with the production of a pair of electrons, one positive and one negative. Thus light is changed into matter, or is the same thing, electricity, a most unexpected result.

Turning to biology, Professor Muller of Texas Univer-

sity, formely of Rice Institute, discovered that exposure to X-rays greatly increases the frequency of biological mutations in animals. This remarkable discovery has enabled the structure of the nuclei of biological cells to be investigated with far-reaching results of fundamental importance. This, I believe, is the first great scientific discovery made in Texas. In the future we may expect that Texas will occupy an honorable place in the world of science, and that the Texas Philosophical Society, now born again after a hundred years, will have among its fellows some natives of this state worthy to be ranked with the great leaders of scientific thought. The University of Texas, with its great and growing endowment, should become one of the leading universities of the world, a center of scientific learning and research for all the state, and our other more or less similar local institutions may be expected to develop in the same way though on a smaller scale.

The Texas Philosophical Society may serve Texas by standing for intellectual progress and against ignorance, superstition, and rotten politics to build up appreciation of and support for scientific learning and research.

President Potts: Since the Inauguration Banquet of the Society, on January 29, 1937, the Society has lost by death three distinguished members: Harry Yandell Benedict, Joseph Stephen Cullinan, and William Morton Wheeler. On motion, duly seconded and carried, I appoint Messrs. Geiser, Hutcheson, and Barker a Committee on resolutions respecting deceased members, to bring in a report at the next Annual Meeting, for publication in the *Proceedings* of the Society.

The report of the nominating committee was then read and adopted:

Your committee on nominations moves the election of the following officers and directors for the term ending December 5, 1938:

For President, EDGAR ODELL LOVETT
For First Vice-President, GEORGE A. HILL, JR.
For Second Vice-President, EUGENE C. BARKER
For Third Vice-President, K. H. AYNESWORTH
For Fourth Vice-President, EDWARD RANDALL
For Fifth Vice-President, ROBERT T. HILL
For Recording Secretary, L. M. LAMAR
For Corresponding Secretary, S. W. GEISER
For Treasurer, GEORGE WAVERLEY BRIGGS
For Librarian, W. E. WRATHER
For Directors:

EDGAR ODELL LOVETT	W. A. RHEA
GEORGE WAVERLEY BRIGGS	IRA KENDRICK STEPHENS
CHARLES SHIRLEY POTTS	WILLIAM JAMES BATTLE
WILLIAM EMBRY WRATHER	JOHN ELZY OWENS
HERBERT PICKENS GAMBRELL	PETER MOLYNEAUX

W. J. BATTLE
GEORGE A. HILL, JR.
HERBERT P. GAMBRELL, *Chairman*

President Lovett then took the chair as presiding officer, and after consideration of sundry matters of the Society, the Centennial Meeting adjourned. President Lovett was host next day, at luncheon, to members of the Society, and their guests, who remained in Houston for the occasion.

EDGAR ODELL LOVETT, *President*
SAMUEL WOOD GEISER, *Secretary*

BY-LAWS OF THE SOCIETY

On May 7, 1936, the incorporators adopted the following By-Laws, which reproduce in spirit and effect the By-Laws of the original Society:

Section I. The annual meetings of the Society shall be held in the city of Dallas, Texas, or at such other places in the State of Texas as the Board of Directors may select from time to time. The annual meetings shall be held on the fifth day of December—such date being the day on which the Society was founded in 1937. The Society shall meet in called meetings at such other times and places as the Board of Directors may decide. The Recording Secretary shall notify in writing all members of the Society at least ten days before the time set for such meetings.

Section II. There shall be three classes of memberships in the Society. (1) Active members, the number of which shall not at any time exceed one hundred; (2) Associate members, the number of which shall not at any time exceed fifty; (3) Foreign members, the number of which shall not at any time exceed twenty-five. To be an active or associate member a person must reside in, have been born in, or have at some time resided in, the geographical boundaries of the late Republic of Texas. All other members shall be foreign members. Vacancies in active membership may be filled from the associate memberships only. Neither associate members nor foreign members shall have voting powers.

Section III. Three members in good standing may nominate a person or persons for membership in the Society, such nominations to be made on forms to be supplied for that purpose and filed with the Recording Secretary of the Society, nor later than one month before the annual meetings in any year. From the nominations so made, the Board of Directors shall recommend to the Society the candidates for membership whom they believe to be qualified for membership. Members shall be elected by ballot by the Society from such lists of nominations and recommendations as its annual meeting. A favorable vote of at least three-fourths of the active members present shall be necessary to the election of any member.

Section IV. The membership fee for admission to the Society shall be ten dollars, payable at the time of acceptance of membership in the Society. There shall be no further dues payable by any member of the Society. The Board of Directors may by a majority vote fix an assessment on all members, but it shall never exceed five dollars in any one year.

Section V. The officers of the Society shall be a President, five Vice-Presidents, one Recording Secretary, one Corresponding Secretary, a Treasurer, a Librarian, and ten Directors, who shall be elected by a majority of the members present at the annual meeting; which officers, at the time of their being balloted for, shall be active members of the Society. They shall hold office for one year or until their successors shall be elected.

Section VI. It shall be the duty of the President to preside at all the meetings of the Society; to see that all its decrees and ordinances are faithfully executed; to lay before the Society all communications that may have

been made to him; and to submit to the Society all communications that may have been made to him; and to submit to the Society such business and matters as he shall deem deserving its attention: In case of a vacancy occurring in any office, he shall fill the same by appointment, till the next annual meeting. He may suspend until the next annual meeting any officer who shall have conducted himself improperly in office.

Section VII. In case of the death, sickness, or inactivity of the President, his duties shall devolve on the Vice-Presidents in the order of their rank.

Section VIII. The Recording Secretary shall keep a book in which he shall record the by-laws of the Society, a list of the members and their addresses, a journal of the proceedings of the Society, and copies of such communications as may be ordered by the Society to be recorded.

Section IX. The Corresponding Secretary shall be charged with all the correspondence of the Society; and he shall keep copies of the same.

Section X. The Treasurer shall have charge of the moneys belonging to the Society, which he shall pay out to the order of the President; or in compliance with an express order only of the Society. His accounts shall be rendered at the annual meeting, and be at all times subject to the inspection of any officer of the Society.

Section XI. The Librarian shall have charge of all books, papers and other personal property acquired by the Society, under such regulations as may be made by the Board of Directors.

Section XII. The officers of the Society shall be *ex-officio* a committee of publication, to act in conformity with such regulations as may hereafter be passed by the Board of Directors.

Section XIII. Members may be expelled for improper conduct by vote of a majority of the members present at an annual meeting.

Section XIV. Ten per cent of the active members of the Society who are in good standing shall constitute a quorum for the transaction of business.

Section XV. These by-laws may be amended by a majority of vote of the members at any annual meeting of this Society, or at any meeting called for that purpose.

OFFICERS OF THE SOCIETY
for the Year 1938

President
EDGAR ODELL LOVETT
First Vice-President
GEORGE A. HILL, JR.
Second Vice-President
EUGENE C. BARKER
Third Vice-President
K. H. AYNESWORTH

Fourth Vice-President
EDWARD RANDALL
Fifth Vice-President
ROBERT T. HILL
Corresponding Secretary
SAMUEL WOOD GEISER
Recording Secretary
LUCIUS MIRABEAU LAMAR
Treasurer
GEORGE WAVERLEY BRIGGS
Librarian
WILLIAM EMBRY WRATHER

DIRECTORS

Edgar Odell Lovett
George Waverley Briggs
Herbert Pickens Gambrell
William James Battle
Peter Molyneaux
John Elzy Owens
Charles Shirley Potts
William Alexander Rhea
Ira Kendrick Stephens
William Embry Wrather

MEMBERS OF THE SOCIETY

AYNESWORTH, KENNETH HAZEN, former president, Texas Surgical Society; regent, University of Texas . . . . 601 Franklin Avenue, *Waco*

BAKER, KARLE WILSON (Mrs. Thomas E.), author . . . . . 1013 North Street, *Nacogdoches*

BARKER, EUGENE CAMPBELL, former president, Mississippi Valley Historical Association; professor of American History, University of Texas *Austin*

BATTLE, WILLIAM JAMES, former president, Texas Fine Arts Association; professor of Classical Languages, University of Texas . . . *Austin*

BIZZELL, WILLIAM BENNETT, president, University of Oklahoma . *Norman*

BRIGGS, GEORGE WAVERLEY, vice-president, First National Bank . *Dallas*

BROGAN, ALBERT PERLEY, dean of Graduate School, University of Texas *Austin*

BURGES, RICHARD FENNER, former president of International Irrigation Congress . . . . . El Paso National Bank Building, *El Paso*

BURGES, WILLIAM HENRY, former president, Texas Bar Association . . . . . First National Bank Building, *El Paso*

BOLTON, HERBERT EUGENE, former president, American Historical Association; professor of American history, University of California . *Berkeley*

CARY, EDWARD HENRY, former president, American Medical Association Medical Arts Building, *Dallas*

CHANDLER, ASA CRAWFORD, professor of biology, The Rice Institute, *Houston*

CLAYTON, WILLIAM L., member of Anderson, Clayton & Co., cotton factors *Houston*

COHEN, HENRY, rabbi, Temple Beth-El . . . . . *Galveston*

CRANE, MARTIN MCNULTY, former attorney-general of Texas Republic National Bank Building, *Dallas*

DILLARD, FRANK CLIFFORD,[1] lawyer . . . . . *Sherman*

DOBIE, J. FRANK, secretary, Texas Folk-Lore Society; professor of English, University of Texas . . . . . *Austin*

FARISH, WILLIAM STAMPS, former president, Humble Oil Company and the American Petroleum Institute; president, Standard Oil Company of New Jersey . . . . . *Houston and New York*

GAMBRELL, HERBERT PICKENS, associate professor of history, Southern Methodist University . . . . . *Dallas*

GEISER, SAMUEL WOOD, professor of biology, Southern Methodist University . . . . . *Dallas*

HACKETT, CHARLES WILSON, professor of Latin-American history, University of Texas . . . . . *Austin*

HILL GEORGE ALFRED, JR., president, Houston Pipe Line Company, and Houston Oil Company of Texas . . . . . *Houston*

HOUSE, EDWARD MANDELL[2] . . . . 104 East 69th Street, *New York*

HARPER, HENRY WINSTON, dean-emeritus of the Graduate School, University of Texas . . . . . *Austin*

HILL, ROBERT THOMAS, former president, Texas Geographical Society . . . . . 5821 Hillcrest Avenue, *Dallas*

HUTCHESON, JOSEPH CHAPPELL, JR., United States circuit judge . . . . . Federal Building, *Houston*

JENNINGS, HERBERT SPENCER, former president, American Society of Zöologists . . . . . The Johns Hopkins University, Baltimore

JONES, CLIFFORD BARTLETT, resident manager for S. M. Swenson & Sons *Spur*

JONES, HOWARD MUMFORD, professor of English, Harvard University *Cambridge*

LAMAR, LUCIUS MIRABEAU, lawyer . . Tower Petroleum Building, Dallas

LEE, UMPHREY, dean of the School of Religion, Vanderbilt University *Nashville*

LEFKOWITZ, DAVID, former president, Central Conference of American Rabbis . . . . . Temple Emanu-El, *Dallas*

LOMAX, JOHN AVERY, honorary curator of folk songs, The Library of Congress . . . . . *Washington*

LOVETT, EDGAR ODELL, president, The Rice Institute . . . *Houston*

MCREYNOLDS, JOHN OLIVER, former president, Pan American Medical Association . . . . . Mercantile Bank Building, *Dallas*

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[1]Died September 26, 1938.

[2]Died March 28, 1938.

MOLYNEAUX, PETER, editor, The *Texas Weekly*; trustee, Carnegie Endowment for International Peace . . . . . *Dallas*

OWENS, JOHN ELZY, vice-president, Republic National Bank . . . *Dallas*

PENNYBACKER, MRS. PERCY V.,[3] former president, General Federation of Women's Clubs . . . . . 606 Whittis Avenue, *Austin*

PIERCE, GEORGE WASHINGTON, chairman of Division of Physical Sciences, Harvard University . . . . . *Cambridge*

POTTS, CHARLES SHIRLEY, dean of the School of Law, Southern Methodist University . . . . . *Dallas*

PURYEAR, CHARLES, dean-emeritus of the Graduate School, Agricultural and Mechanical College of Texas . . . . . *College Station*

RAMSDELL, CHARLES WILLIAM, former president, Mississippi Valley Historical Association, and of the Southern Historical Association; Professor of American history, The University of Texas . . . . . *Austin*

RANDELL, EDWARD, president of the Rosenberg Library; president of the Galveston County Medical Society; president of the Board of Regents, University of Texas . . . . . *Galveston*

RHEA, WILLIAM ALEXANDER, professor of law, Southern Methodist University . . . . . *Dallas*

SCHOFFELMAYER, VICTOR HUMBERT, agricultural editor, The *News* . . . . . *Dallas*

SMITH, THOMAS VERNOR, professor of philosophy, The University of Chicago; member Illinois State Senate . . . . . *Chicago*

STEPHENS, IRA KENDRICK, professor of philosophy, Southern Methodist University . . . . . *Dallas*

SUMNERS, HATTON WILLIAM, congressman from Texas . . . . . *Dallas and Washington*

TRUETT, GEORGE WHITE, president, Baptist World Alliance . . . . . First Baptist Church, *Dallas*

WEBB, WALTER PRESCOTT, professor of history, University of Texas *Austin*

WEISER, HARRY BOWYER, dean of The Rice Institute, and professor of chemistry . . . . . *Houston*

WEST, ELIZABETH HOWARD, librarian, Texas Technological College . . . . . *Lubbock*

WHARTON, CLARENCE RAY, lawyer, Esperson Building . . . *Houston*

WRATHER, WILLIAM EMBREY, former president, American Society of Economic Geologists; president, Texas State Historical Association . . . . . 4300 Overhill Drive, *Dallas*

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[3]Died February 4, 1938.

NECROLOGY

HARRY YANDELL BENEDICT

Harry Yandell Benedict was born in Louisville, Kentucky, November 14, 1869, and died in Austin, Texas, May 10, 1937. With his widowed mother and his grandfather, H. J. Peters, he came to Texas at the age of seven and settled on a ranch in Young County, near the town of Graham. The frontier ranchhouse was equipped with a well-stocked library, and its mistress was a cultured and intellectual woman. Tutored by his mother Harry Yandell Benedict entered the University of Texas with advanced standing in February, 1889, and graduated with the B. S. degree in June, 1892. He took the M. A. degree the following year, majoring in mathematics. During 1893-1895, he was a graduate student at the University of Virginia and assistant at the Leander McCormick Observatory. From 1895 to 1898 he was at Harvard, from which institution he obtained the Ph.D. degree. He held also the LL.D. degree from Baylor and Southwestern universities..

His teaching career began as assistant and tutor in mathematics at the University of Texas. After his graduation from Harvard, he was for half a year instructor in mathematics and astronomy at Vanderbilt University. From September, 1899, until his death, nearly thirty-six years later, he was a well-loved figure on the campus of the University of Texas, serving as instructor, adjunct professor, associate professor, professor, dean of the College of Arts and Sciences, and president. During his long career, by his original method of teaching, by service on important committees, and by wise and judicious administration, his life touched every phase

of the University's development and profoundly influenced its character.

Though his administration as president of the University of Texas was identified with its gratifying physical growth, his supreme interest was centered in its spiritual and intellectual development. He strove to build an institution of superior teachers and fruitful scholars, and to create an atmosphere of vital learning which would penetrate the civic character of the State. He labored faithfully, against recurrent disappointments, to coordinate the various educational institutions of the State into a harmonious system, advancing from the elementary grades of the public schools to the graduate school of the University. He set and maintained a standard of intellectual independence that was an inspiration to all who knew him. He practiced in all sincerity the much abused doctrine of academic freedom, and was zealous in its defense. His regard for the rights of his faculty was so sincere and so unobtrusive that the ease and security which was its fruit were accepted by its beneficiaries as a commonplace of University administration.

Dr. Benedict's broad learning, illuminated by an unusual understanding of human nature, was an honor to The Philosophical Society of Texas. Like Thomas Jefferson, whose intellectual heir he was, he might have filled with distinction a professorship in half a dozen different specialties—in history, literature, physics, philosophy, botany, and geology, as well as in astronomy, his chosen science. He venerated scholarship, which he might have defined as the expansion of useful knowledge and its adaptation to the problems of life. But, free from pedantry and endowed with a sense of humor that forbade his taking himself or others too seriously, he had little patience with the traditional scho-

lar's too frequent lack of perspective and dissociation from practical affairs. The jibes which his irrepressible humor directed at the trappings of scholarship were sometimes erroneously ascribed to lack of appreciation of its output. His own published works were: *A Documentary History of the University of Texas; Peregrinusings*, a volume of witty campus memorabilia; *The Book of Texas* (with John A. Lomax); and many articles contributed to various magazines and learned journals.

In personal relationships, Dr. Benedict had a rare gift for friendship. It was a quality not easy to analyse. Fundamentally, it was the product of a truly sweet and gentle nature. He was tolerant, patient, judicial, considerate, and always self-controlled. Withal, he was genuinely democratic. His broad knowledge and lively interests attracted men and women in many fields of activity. They admired his unpretentious learning, enjoyed his shrewd humor, and loved his steadfast character. In his death, The Philosophical Society of Texas has suffered an irremediable loss.[1]

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[1]These resolutions are adapted in part from a draft prepared by Professor Barker for a committee of the faculty of the University of Texas, and part is incorporated in the faculty minutes.

JOSEPH STEPHEN CULLINAN

Joseph Stephen Cullinan, dean of the oil fraternity of Houston, and one of the first members of the Philosophical Society of Texas, died March 11, 1937 in Palo Alto, California, whither he had gone for a visit with his old friend, Herbert Hoover. Mr. Cullinan was born in Sharon, Pennsylvania, December 31, 1860, of Irish parentage. His education was obtained in the common schools of Pennsylvania. As a youth and young man, he worked in the Pennsylvania oil fields—thirteen years with the Standard Oil Company—and he was associated with the oil industry throughout his long life. In 1898 he entered the oil industry in Texas in our first oil field at Corsicana, where he laid the foundations of the Magnolia Petroleum Company, now a subsidiary of the Standard Oil Company of New Jersy. He was a major figure in the Spindletop field at Beaumont, where he helped to form the Texas Company, of which he was president from 1903 to November, 1913. He organized the first pipe-line and refinery units in Texas. In 1913 he withdrew from the Texas Company, and organized the Farmers Production Company, which in thirteen years paid in dividends to the stockholders $60,000 for each $100 share of stock. In 1916 he was organizer and president of the American Republics Corporation of Delaware. It was while head of this corporation, in 1927, that he waged a successful fight for the control of the company against a powerful group of stockholders aligned against him.

Yet in spite of his great preoccupation with business affairs, Mr. Cullinan found time for public service on numerous commissions and conferences. He was member of numerous societies having scientific and cultural aims. During the

Great War he helped Mr. Hoover in the U. S. Food Administration. Mr. Cullinan was on his way to Palo Alto for a reunion with Mr. Hoover, when the occurrence happened that resulted in his death. While in San Francisco, on March 8, 1937, an earthquake tremor early in the morning caused him to leap out of bed; he caught cold, took pneumonia, and died.

Mr. Cullinan was deeply interested in the work of the Philosophical Society of Texas, and believed that it held great possibilities for the advancement of culture in Texas. It seems an unnecessarily cruel fate that kept him from seeing the fruition of an organization in whose progress and success he held so deep an interest.

WILLIAM MORTON WHEELER

William Morton Wheeler, Director Emeritus of the Bussey Institution of Harvard University, died in Cambridge, Massachusetts, April 19, 1937. He was seventy-two years old, having been born in Milwaukee on the nineteenth of March, 1865. As a boy, he became interested in natural history, especially of the insects—an interest that was deepened by his teachers in his four years at the German-American Normal School of Milwaukee, from which he was graduated at the age of nineteen. About this time, as rare fortune would have it, he made the acquaintance of Charles Otis Whitman, director (1886-89) of the Edward Phelps Allis Lake Laboratory at Milwaukee—a keen scholar and zoölogist, with German training under Leuckart at Leipzig. Dr. Whitman was later to become the first professor of zoölogy at the newly-founded Clark University, and Chicago University; and it is to Whitman that Wheeler owed many of his early opportunities. It appears that Wheeler's appointment at the early age of twenty-two to the curatorship of the Milwaukee Public Museum was owing in part to Whitman's sponsorship of the eager young naturalist. In this position, Wheeler continued for two years, then followed Whitman to Clark University, Worcester, Massachusetts. Here he studied for two years, holding at the same time a fellowship in animal morphology. He received his Ph.D. degree in 1892. When Dr. Whitman was called by President William Rainey Harper, in that year, to head the zoölogy department of the newly-founded University of Chicago, Dr. Wheeler went with him, and remained at Chicago until 1899, first as instructor, and then as assistant professor. In 1893, Dr. Wheeler engaged in zoölogical research, especially on the

embryology of invertebrate animals, at Naples, and also studied for brief periods at the universities of Würzburg and Liège.

In 1899, Dr. Wheeler became the head of the department of zoölogy at the University of Texas—a position he retained until 1903. Following his departure from Texas he was, for five years, curator of invertebrate zoölogy at the American Museum of Natural History, in New York City. In 1908, he accepted a professorship of entomology, and the deanship of the Bussey Institution of Harvard University, which he held for twenty-one years until retirement for age in 1929, when he became director emeritus.

Dr. Wheeler was a brilliant student of the zoölogical sciences; and his work in a number of fields established incontestibly his claims to eminence. He became a member or honorary member of numerous American and foreign learned societies, among them the National Academy of Sciences and the American Philosophical Society. He served as exchange-professor from Harvard University to the University of Paris in 1925. His work in the biology of insects, especially of the ants, was of unique importance and value, and he was known throughout the scientific world as the greatest authority in this special field.

One of his old friends and fellow-entomologists says of him:

The sudden death of Wheeler . . . seems in a manner incredible. For so many years he has been part of our entomological world, and we had not contemplated a time when we should have to do without him. In a true sense, we need not think of such a time, for his works remain and will retain their essential vitality far into the future. Posterity will read them with profit and admiration, but we are sorry for those who did not know the living, energetic, enthusiastic

Wheeler as we have known him in the flesh . . . He had an almost uncanny knowledge of the ants, and could recognize most of the North American kinds at a glance . . . Wheeler has made his great contributions, not only to the literature of his subject, but also to the enrichment of the lives of numerous disciples, many of whom are now doing important work. It has been impossible to escape his influence . . . He combined in one individual a high development of the emotional and intellectual faculties. One can imagine that he might have been a great religious or political leader, had he not adopted the principles and practices of the scientific worker.[1]

In his letter accepting membership in the Philosophical Society of Texas just four months before his death, Dr. Wheeler wrote:

I feel greatly honored to be asked to become a member of the Philosophical Society of Texas. I have been greatly impressed with the extraordinary material and intellectual development of the state since my brief tenure of a professorship at its university thirty-five years ago and wish the Philosophical Society every success in its future development.

E. C. Barker
Joseph C. Hutcheson, Jr.
S. W. Geiser, *Chairman*

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[1]T. D. A. Cockerell, in *The Scientific Monthly*, Vol. 44, 1937, pp. 569-71, *passim*.

of the University's development and profoundly influenced its character.

Though his administration as president of the University of Texas was identified with its gratifying physical growth, his supreme interest was centered in its spiritual and intellectual development. He strove to build an institution of superior teachers and fruitful scholars, and to create an atmosphere of vital learning which would penetrate the civic character of the State. He labored faithfully, against recurrent disappointments, to coordinate the various educational institutions of the State into a harmonious system, advancing from the elementary grades of the public schools to the graduate school of the University. He set and maintained a standard of intellectual independence that was an inspiration to all who knew him. He practiced in all sincerity the much abused doctrine of academic freedom, and was zealous in its defense. His regard for the rights of his faculty was so sincere and so unobtrusive that the ease and security which was its fruit were accepted by its beneficiaries as a commonplace of University administration.

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lar's too frequent lack of perspective and dissociation from practical affairs. The jibes which his irrepressible humor directed at the trappings of scholarship were sometimes erroneously ascribed to lack of appreciation of its output. His own published works were: *A Documentary History of the University of Texas; Peregrinusings*, a volume of witty campus memorabilia; *The Book of Texas* (with John A. Lomax); and many articles contributed to various magazines and learned journals.

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